GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen Ltd.

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Title:
Perfect score:
Sequence:
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Maximum Match 100%
Listing first 45 summaries
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             A_Geneseq_36:*
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Gapop 10.0 , Gapext 0.5
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73
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2.528 Million cell updates/sec
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result	Score	Query Match	Length DB	DB	Ħ	Description
۲	73		14	16	R76642	Peptide derived fr
N	73	100.0	14	18	W18850	65 kD Glutamic aci
ω	53	72.6	20	16	R72280	Glutamic acid deca
4	53	72.6	20	21	Y59553	GAD65 fragment, pe
ر ت	47	64.4	20	16	R72281	Glutamic acid deca
6	47	64.4	20	21	Y59554	GAD65 fragment, pe
7	41	56.2	20	16	R88668	Human glutamic aci
80	37	50.7	20	18	W18849	65 kD,Glutamic aci
9	34	46.6	21	15	R47505	Tumour supressor g
10	32	43.8	14	16	R76643	Peptide derived fr
11	32	43.8	14	18	W18851	65 kD Glutamic aci
12	31	42.5	23	12	R13416	Carbastatin-like p

45	44	43	42	41	40	39	38	37	36	35 5	34	ω ω	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
25	25	25	25	25	25	. 26	26	26	26	26	26	26	26	26	27	27	27	27	27	27	27	27	27	28	28	28	29	29	29	29	29	30
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10	9	9	œ	œ	&	24	23	23	21	20	17	13	12	7	22	21	15	13	13	10	10	9	9	15	12	11	23	23	23	15	15	œ
16	20	18	20	20	20	20	21	21	20	8	20	20	18	19	21	21	20				19	14	14	20	14	17	21					
R83761	Y10130	W15693	Y08186	Y08173	Y08198	W87558	Y52257	Y52256	Y27760	W40790	W98997	W95069	W47807	Y20455	Y98435	Y98327	Y42762	22	P10115	W47272	W41465	R41624	R41613	Y30504	R41752	R92106	868187	W88049	W11592	R68604	R68602	Y08174
NGF derived struct	T cell epitope/MHC	Platelet aggregati	Clotting factor VI	factor	-		D)		ecrete	•	I domain peptide P	Ř	Cyclic peptide or	Ħ.			otassium ch		Sequence which cor	dula	Fragment of nemato	43.	TRIP-32. Syntheti	Mutant sequence of	Conserved NT-4 reg	Human RIZ cr2 frag		Amino acid sequenc	n br	met-NDF-betal(177-	-alpha2(177-2	ictor V

ALIGNMENTS

RESULT R76642 Albert W, Stahl P, DE4418091-A1. Antigen-specific activated T-lymphocytes and their detection interaction with inventive peptide(s) of peptide-MHC complexes; useful in diagnosis of e.g. diabetes and auto:immune diseases 27-JUL-1995. $\tt diabetes; T-cell subpopulation; detection; antigen production; diagnosis; autoimmune disease.$ WPI; 1995-264505/35. 04-FEB-1994; 20-JAN-1994; 24-MAY-1994; Homo sapiens. Peptide derived from human glutamic acid decarboxylase 1. 05-MAR-1996 (first entry) R76642; R76642 standard; peptide; 14 (ENDL/) ENDL J.

(BOEF) BOEHRINGER MANNHEIM GMBH. Dornmair K, Schendel D; 94DE-4403522. 94DE-4401629. 94DE-4418091 Endl J, A A Jung G, Meinl bу

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Best Local Similarity
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                         W18842-70 are peptide fragments of the 65 kD human glutamic acid decarboxylase (GAD). The fragments are autoreactive substances used for decarboxylase (GAD). The fragments are autoreactive substances used for disposit of insulin dependent diabetes mellitus (IDDM). The diagnosis is determined by using a claimed method for diagnosis of cell-mediated diseases, which is effected diseases or a predisposition to cell-mediated diseases, which is effected by administering an autoreactive substance intradermally and establishing the diagnosis on the basis of the occurrence or lack of a positive reaction at the site of administration. The method is used for diagnosis of autoimmune and tumour diseases, preferably T-cell-mediated diseases such as rheumatoid arthritis, multiple sclerosis and especially IDDM.
                                                                                                                                                                                                                                                                                            Donie F,
Pozzilli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R76642-62 are derived from human glutamic acid decarboxylase and specifically react with T-cell sub-populations isolated from recently diagnosed Type-I diabetics. Pharmaceutical compsns. conty. these peptides and those shown in R88668-72, are useful for the diagnosis of a disease or predispositions of immune system disease, tumours, and autoimmune diseases, including diabetes. The peptides are able to detect specific T-cell subpopulations that are then used for antigen prodn.,
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 Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  predisposition; autoimmune;
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                                                                                                                                                                                                                                                                                                                                        (BOEF ) BOEHRINGER MANNHEIM GMBH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               insulin-dependent diabetes mellitus;
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                                                                                                                                                                                                                                   for diagnosis of cell-mediated diseases, esp. diabetes
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 AA;
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P;
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diabetes mellitus; IDDM; cell-mediated disease;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tumour; rheumatoid arthritis;
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Pred. No.
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                                                                                                                                                                                                                                                                                                           Kientsch-engel R;
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4.1e-07;
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RESULT
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Best Local S
Matches 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q86481 and Q86482 encode R71733 and R79105, rat and human glutamic acid decarboxylase (GAD65) respectively, from which the GAD65 fragments described in R72261-R72298 were derived. These fragments can be used to detect autoantibodies against GAD, e.g. to diagnose and treat GAD-related autoimmune disorders, such as insulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New polypeptide fragments of glutamic acid decarboxylase -diagnosis and treatment of auto:immune disease, esp. insuli dependent diabetes, also related nucleic acid, vectors, antibodies, hybridoma(s) etc.
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                                                                                                                                                                                                                                                                                                        Local Similarity 100 les 10; Conservative
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                                                                                    peptide;
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stiff man
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disease.
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03-APR-2000

(first entry)

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Best Local :
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21-SEP-1990;
18-JUN-1991;
                                                                                                                                                                                                                                                                                                                                                                          This sequence represents a fragment of the glutamic acid decarboxylase 65 (GAD65) protein. The invention relates to a method of ameliorating GAD associated autoimmune disorders by administering a GAD65 peptide to the patient. The method can be used for ameliorating GAD associated autoimmune disorders such as IDDM (insulin dependent diabetes mellitus) and Stiff man disease. GAD65 can also be useful for screening drugs that alter GAD function, for generating monoclonal antibodies and in immunoassays. GAD65 is an effective diagnostic tool for predicting IDDM and the diagnosis is quite easy. It is also possible to obtain much larger quantities of polypeptide via recombinant techniques than are available from natural sources.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAD65; glutamic acid decarboxylase 65; autoimmune disorder; IDDM; insulin dependent diabetes mellitus; Stiff man disease; diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1; Column 42; 61pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ameliorating glutamic acid decarboxylase associated autoimmune disorders such as insulin dependent diabetes mellitus and Stif
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US5998366-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAD65 fragment,
                                                                          Glutamic acid decarboxylase; GAD65; auotimmune insulin-dependant diabetes mellitus; stiff man
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2000-095930/08.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tobin AJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09-APR-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   therapy.
  23-MAR-1995
                         W09507992-A
                                                                                                             Glutamic acid
                                                                                                                                   13-NOV-1995
                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (REGC ) UNIV CALIFORNIA.
                                                                                                                                                                                  R72281 standard;
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                                                                                                                                                                                                                                             ilikcdergk 20
                                                                                                                                                                                                                                                                                           l Similarity
10; Conserv
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                                                                                                                                                                                                                                                                                                                                                       20 AA;
                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                   (first
                                                                                                            decarboxylase
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90US-0586536.
91US-0716909.
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                                                                                                                                                                                  Peptide;
                                                                                                                                   entry)
                                                                                                                                                                                                                                                                                                        72.6%; Score 53; 100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Erlander MG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             English.
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                                                                                                                                                                                                                                                                                           0;
                                                                                                             (GAD65) fragment.
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                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                        DB 21;
0.0027;
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                                                                           disease.
                                                                                     disorders;
                                                                                                                                                                                                                                                                                                                  Length 20
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RESULT ID STANCE TO STANCE
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Best Local Similarity
Matches 9; Conser
                                                                                                                                                                                                                                                                     07-JUN-1995;
21-SEP-1990;
18-JUN-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New polypeptide fragments of glutamic acid decarboxylase - for diagnosis and treatment of auto:immune disease, esp. insulin dependent diabetes, also related nucleic acid, vectors, antibodies, hybridoma(s) etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAD65; glutamic acid decarboxylase 65; autoimmune disorder; insulin dependent diabetes mellitus; Stiff man disease; diac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAD65 fragment, peptide #21.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 dependant diabetes mellitus or stiff man disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; Page 76; 100pp; English.
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                       Ameliorating glutamic acid decarboxylase associated autoimmune disorders such as insulin dependent diabetes mellitus and Stifdisease -
                                                                                                                                                                                                                                                                                                                                                                                                                         07-DEC-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Y59554 standard;
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                                                                                                                                                                        Tobin AJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                         (REGC ) UNIV CALIFORNIA
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90US-0586536.
91US-0716909.
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Pred. No.
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0.034;
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                                                      Stiff man
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61pp; English.

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Best Local
      R88668 is derived from residues 306-325 of human glutamic acid decarboxylase and specifically reacts with a T-cell sub-population isolated from recently diagnosed Type-I diabetics. Pharmaceutical compsns. contg. this peptide and those shown in R88667 and R76642-62, are useful for the diagnosis of a disease or predispositions of immune system diseases, tumours, and autoimmune diseases, including diabetes. The peptides are able to detect specific T-cell subpopulations that are then used for antigen prodn., e.g. by reinjection.
                                                                                                                                                                                                                                                                    Albert W,
Stahl P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This sequence represents a fragment of the glutamic acid decarboxylase 65 (GAD65) protein. The invention relates to a method of ameliorating GAD associated autoimmune disorders by administering a GAD65 peptide to the patient. The method can be used for ameliorating GAD associated autoimmune disorders such as IDDM (insulin dependent diabetes mellitus) and Stiff man disease. GAD65 can also be useful for screening drugs that alter GAD function, for generating monoclonal antibodies and in immunoassays. GAD65 is an effective diagnostic tool for predicting IDDM and the diagnosis is quite easy. It is also possible to obtain much larger quantities of polypeptide via recombinant techniques than are
                                                                                                                                                                          Antigen-specific activated T-lymphocytes and their detection interaction with inventive peptide(s) of peptide-MHC complex useful in diagnosis of e.g. diabetes and auto:immune disease
                                                                                                                                                                                                                                                                                                               (ENDL/)
                                                                                                                                               Claim 1; Page 14;
                                                                                                                                                                                                                                        WPI; 1995-264505/35
                                                                                                                                                                                                                                                                                                                                                           04-FEB-1994;
20-JAN-1994;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           diabetes; T-cell subpopulation; detection; antigen production; diagnosis; autoimmune disease.
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9; Conser
                                                                                                                                                                                                                                                                                                                 BOEHRINGER MANNHEIM GMBH.
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94DE-4401629.
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                                                                                                                                            21pp; German
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100.08; Pred. No.
                                                                                                                                                                                                                                                                                  Endl J,
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               Query Match
Best Local
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Best Local
                                                                                        W18842-70 are peptide fragments of the 65 kD human glutamic acid decarboxylase (GAD). The fragments are autoreactive substances used for decarboxylase (GAD). The fragments are autoreactive substances used for diagnosis of insulin-dependent diabetes mellitus (IDDM). The diagnosis is determined by using a claimed method for diagnosis of cell-mediated diseases, which is effected diseases or a predisposition to cell-mediated diseases, which is effected by administering an autoreactive substance intradermally and establishing the diagnosis on the basis of the occurrence or lack of a positive reaction at the site of administration. The method is used for diagnosis of autoimmune and tumour diseases, preferably T-cell-mediated diseases such as rheumatoid arthritis, multiple sclerosis and especially IDDM.
                                                                  Sequence
                                                                                                                                                                                                                                          Claim 11; Page 10; 12pp;
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                                                                                                                                                                                                                                                                  Skin test for diagnosis of cell-mediated diseases, esp. diabetes involving intradermal admin. of auto:reactive substances
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Pozzilli P,
                                                                                                                                                                                                                                                                                                                                                                                                      20-JUL-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 predisposition; autoimmune; tumour; rheumatoid arthritis;
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Local Similarity
les 7; Conserv
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P, Stahl
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P;
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100.0%;
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           Score 37;
Pred. No.
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Pred. No.
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               DB 18;
2.3;
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                         Length
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ID R47505 standard;
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Best Local S
Matches 5
                                                                                                                                                                                                                                                                                   The sequences given in R47505-09 represent epitopic fragments of the protein encoded by the tumour suppressor gene DCc. These peptides are reactive with the monoclonal antibody (MAb) of the invention, pref. the mouse MAb KM890, belonging to the IgG3 subclass. This MAb may be used in immunohistochemical staining for quantitative determination of DCC gene proucts, as well as for cancer diagnosis, eg. by histological tissue examination and imaging.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R47505;
                                                                   diabetes; T-cell subpopulation; detection; antigen production;
diagnosis; autoimmune disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Epitope; tumour suppressor gene; DCC; monoclonal antibody; MAb; mouse; KM890; IgG3 subclass; cancer.
                                                                                                             05-MAR-1996
                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                          Example
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        05-JAN-1994.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tumour supressor gene DCC epitope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11-JUL-1994
24-MAY-1994;
                 27-JUL-1995.
                                  DE4418091-A1
                                                  Homo sapiens
                                                                                             Peptide derived
                                                                                                                              R76643;
                                                                                                                                             R76643 standard;
                                                                                                                                                                                                                                                                                                                                                                                   Anti-DCC gene prod. specific monoclonal antibody - useful for
                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1994-009337/02
                                                                                                                                                                                                                                                                                                                                                                                                                                     (KYOW ) KYOWA HAKKO KOGYO CO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
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5; Conservative
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                                                                                                                                                                                                                                                                    21
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94DE-4418091.
                                                                                            from human glutamic acid decarboxylase 2.
                                                                                                                                             peptide;
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Pred. No. 8
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RESULT 11
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Best Local S
Matches 6
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R76642-62 are derived from human glutamic acid decarboxylase and specifically react with T-cell sub-populations isolated from recently diagnosed Type-I diabetics. Pharmaceutical compsns. contg. these peptides and those shown in R77571-72, are useful for the diagnosis of a disease or predispositions of immune system diseases, tunours, and autoimmune diseases, including diabetes. The peptides are able to detect specific T-cell subpopulations that are then used for antigen prodn.,
                                                                                                                                                                                                                                                                                                         insulin-dependent diabetes mellitus; IDDM; cell-mediated predisposition; autoimmune; tumour; rheumatoid arthritismultiple sclerosis.
                                                                                                                                                                                                                                                                                                                                      GAD; 65 kD; human; glutamic acid decarboxylase; autoreactive; diagnosis; insulin-dependent diabetes mellitus; IDDM; cell-mediated disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Antigen-specific activated T-lymphocytes and their detection interaction with inventive peptide(s) of peptide-MHC complexes; useful in diagnosis of e.g. diabetes and auto:immune diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          04-FEB-1994;
20-JAN-1994;
Skin test for diagnosis of cell-mediated diseases, involving intradermal admin. of auto:reactive subst
                                             WPI; 1997-088254/09
                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                  65 kD Glutamic acid decarboxylase peptide fragment 12.
                                                                                                                                                                                                                                                                                                                                                                                                                   05-JAN-1998
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                                                                                                                                                      20-JUL-1995;
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(BOEF ) BOEHRINGER MANNHEIM GMBH
                                                                           Pozzilli P,
                                                                                                                       (BOEF ) BOEHRINGER MANNHEIM GMBH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 ILIKCD 6
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                                                                                          Endl J,
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94DE-4401629.
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100.0%;
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Pred. No.
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                                                                                          6
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                                                                                           Kientsch-engel
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R13416
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Best Local S
Matches 7
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Best Local (
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                                                                                                                                               The peptides represented in R13416-18 can be used in a pharmaceutical prod. for treating disease caused by excess reaction of carbain,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               w18842-70 are peptide fragments of the 65 kD human glutamic acid decarboxylase (GAD). The fragments are autoreactive substances used for diagnosis of insulin-dependent diabetes mellitus (IDDM). The diagnosis is determined by using a claimed method for diagnosis of cell-mediated diseases or a predisposition to cell-mediated diseases, which is effected by administering an autoreactive substance intradermally and establishing the diagnosis on the basis of the occurrence or lack of a positive reaction at the site of administration. The method is used for diagnosis of autoimmune and tumour diseases, preferably T-cell-mediated diseases such as rheumatoid arthritis, multiple sclerosis and especially IDDM.
                                                                                                             Sequence
                                                                                                                                                                                      Claim 1; Page 1; 5pp; Japanese.
                                                                                                                                                                                                           Human carbastatin-like polypeptide - for treating diseases caused by excess reaction of carbain, e.g. muscular dystrophy
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Carbastatin-like polypeptide (1).
                                                                                                                                                                                                                                                     WPI; 1991-248730/34.
                                                                                                                                                                                                                                                                             (TAKA-) TAKARA SHUZO KK.
                                                                                                                                                                                                                                                                                                                              21-NOV-1989;
                                                                                                                                                                                                                                                                                                                                                      11-JUL-1991.
                                                                                                                                                                                                                                                                                                                                                                               JP03161500-A.
                                                                                                                                                                                                                                                                                                                                                                                                                               Carbastatin;
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                                               Local Similarity
les 7; Conserv
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                                                                                                                                   in muscular distrophy.
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                      LIKCDERGKMIPS 14
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                                                                                                             23 AA;
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                                               Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                               carbain; muscular distrophy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                      89JP-0300844
                                                                                                                                                                                                                                                                                                                             89JP-0300844.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                peptide; 23 AA.
                                                          42.5%;
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100.0%; Pred. No.
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                                              Score 31; DB Pred. No. 33; 1; Mismatches
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13;
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RESULT 13
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Best Local :
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                       Alpha; beta; new differentiation factor; NDF; human; rat; p185-n tyrosine phosphorylation; differentiation; phenotype; proliferat wound; tumour; epithelial tissue; breast; stomach; PCR; amplify; gastrointestinal disease; Barrett's oesophagus; primer;
                                                                                                                                                                                                                                   NDF-alpha2(177-241) N-terminal fragment.
                                                                          01-SEP-1995
                                                                                                            R68602 standard; Peptide; 15 AA.
                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                        Claim 4; Page 34; 51pp; German.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Y08174 standard; peptide; 8 AA
                 (non-)cystic
                                                                                                                                                                                                                                                                                                                                        Peptides with affinity for blood clotting
                                                                                                                                                                                                                                                                                                                                                        WPI; 1999-312410/26
                                                                                                                                                                                                                                                                                                                                                                        Jungbauer A;
                                                                                                                                                                                                                                                                                                                                                                                                      13-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                     12-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Coagulation factor VIII; clotting factor VIII; diagnosis; treatment;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Clotting factor VIII binding peptide
                                                                                                                                                                                                                                                                                                                                                                                       (OCTA-) OCTAPHARMA AG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  disorder; blood coagulation.
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                                                                                                                                                                                       41.18;
57.18;
                                                                                                                                                                                Pred. No.
3; Mismatc
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                                                                                                                                                                                DB 20; I
2.1e+05;
hes 0;
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                 primer;
disease.
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Rattus rattus

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Best Local S
Matches 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This sequence represents the N-terminal fragment of the human neu differentiation factor (NDF), NDF-alpha2(177-241). Recombinantly produced NDF bearing this N-terminal sequence was found to stimulate tyrosine phosphorylation of the neu receptor protein in an activity assay. NDF peptides have the ability to induce a differentiated phenotype in certain cell lines and can stimulate or inhibit proliferation of certain cell lines. The NDF's can be used to treat wounds, tumours derived from epithelial tissue of the breast, stomach etc., gastrointestinal disease, Barrett's cesophagus, (non-)cystic kidney disease or inflammatory bowel disease. The CDNA sequences encoding these protein sequences were used in the isolation of related sequences from human CDNA libraries which encode human NDF's.
                                                                                                                                                 Alpha; beta; neu differentiation factor; NDF; human; rat; p185-neu; tyrosine phosphorylation; differentiation; phenotype; proliferation; wound; tumour; epithelial tissue; breast; stomach; PCR; amplify; gastrointestinal disease; Barrett's oesophagus; primer; (non-)cystic kidney disease; inflammatory bowel disease.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New recombinant neu differentiation factors and corresp. are used in the treatment of tumours, dermal wounds, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1995-022805/03
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                                                                                                                        Rattus rattus
                                                                                                                                                                                                                                     met-NDF-betal(177-246) N-terminal fragment.
                                                                                                                                                                                                                                                                  01-SEP-1995
                                                                                                                                                                                                                                                                                                                         R68604 standard; Peptide; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gastrointestinal, kidney and inflammatory bowel diseases
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             21-MAY-1993;
                                      23-MAY-1994;
                                                                                             WO9428133-A.
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             93US-0066384
                                      94WO-US05769.
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Pred. No. 48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sugarman BJ;
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RESULT
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Best Local S
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                                                                                             26-JUL-1993;
25-MAY-1990;
14-JAN-1991;
22-APR-1992;
29-APR-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               differentiation factor (NDF), NDF-betal(177-246). Recombinantly produced NDF bearing this N-terminal sequence was found to stimulate tyrosine phosphorylation of the new receptor protein in an activity assay. NDF peptides have the ability to induce a differentiated phenotype in certain cell lines and can stimulate or inhibit proliferation of certain cell lines. The NDF's can be used to treat wounds, tumours derived from epithelial tissue of the breast, stomach etc., gastrointestinal disease, Barrett's oesophagus, (non-)cystic kidney disease or inflammatory bowel disease. The cDNA sequences encoding these protein sequences were used in the isolation of related sequences from human cDNA libraries which encode human NDF's.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New recombinant neu differentiation factors and correspare used in the treatment of tumours, dermal wounds, and gastrointestinal, kidney and inflammatory bowel diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hu S,
                                                                                                                                                                                                                                                                     Heparin-binding growth factor; erbB-2 ligand; EGFR ligand; epidermal growth factor receptor; tyrosine phosphorylation; breast cancer; marker; heregulin.
                                  Lippman ME,
                                                                                                                                                                                                                       US5578482-A.
                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                        Human breast cancer glycoprotein gp30 tryptic peptide
                                                                                                                                                                                                                                                                                                                                                   03-APR-1997
                                                                                                                                                                                                                                                                                                                                                                          W11592;
                                                                                                                                                                                                                                                                                                                                                                                                  W11592 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This sequence represents the N-terminal fragment of the human neu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 14; Page 100; 341pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1995-022805/03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (AMGE-) AMGEN INC
                                                                                                                                                                        25-MAY-1990;
                                                                                                                                                                                                 26-NOV-1996
                                                           (GEOU ) UNIV
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4 lvkcaekek 12
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5; Conserv
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                                  Lupu R;
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                                                                                                                       93US-0096277.
90US-0528438.
91US-0640497.
                                                                                              92US-0872114
92US-0875788
                                                                                                                                                                        9005-0528438
                                                                                    92US-0917988
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            39.7%;
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48;
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WPI; 1997-020415/02

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Best Local S
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24-JUL-1992;
31-OCT-1995;
                                                                                                    Antibody s
ligand in
W884045-49 represent the peptide fragments obtained after trypsin digest of the protein gp30. Gp30 is a 30 kDa growth factor that induces phosphorylation of erbB-2 protein p185 in cells that overexpress erbB-2, induces internalisation of the erbB-2 receptor, stimulates growth of erbB-2-overexpressing cells at low concentrations, inhibits growth of erbB-2-overexpressing cells at high concentrations, reverses
                                                                                                                                                                               (LIPP/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Polypeptides were purified from media conditioned by the oestrogen receptor negative human breast cancer cell line MDA-MB-231 and the Sk-Br-3 breast cancer cell line. The polypeptides were partially digested with trypsin and the tryptic peptides were separated by HPLC on a C18-reversed phase column. Single peaks were subjected to protein sequence analysis; five independent fragments were sequenced. The present sequence was obtained from peak 5.
                                                                                                                                                                                                                                                                     26-JUL-1993;
25-MAY-1990;
                                                                                                                                                                                                                                                                                                      31-OCT-1995;
                                                                                                                                                                                                                                                                                                                            09-FEB-1999
                                                                                                                                                                                                                                                                                                                                                US5869618-A.
                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                    Amino acid sequence of a gp30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    W88049 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
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lvkcaekek 9
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                                                                                                                                                                              LIPPMAN M E.
LUPU R.
                                                                               20;
                                                                                                    specific for 30 kD erbB-2 ligand -
n cancer prognosis or diagnosis
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         reted by
                                                                             Fig 17B;
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92US-0917988.
95US-0550815.
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90US-0528438.
91US-0640497.
92US-0872114.
                                                                                                                                                                                                                                                                                                      95US-0550815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    peptide;
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                                                                           61pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              39.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61pp;
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                                                                             English.
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                                                                                                                                                                                                                                                                                                                                                                                                    phosphorylation; antibody,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          for inhibiting erbB-2
                                                                                                              useful
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inhibiting the 5-

(epidermal growth factor

receptor),

where the

cells are

This sequence represents a fragment of the gp30 protein (I) that binds to clone gp30/alphal. The invention relates to a protein (I) that binds to heparin-Sepharose, has a molecular weight of 30 kDa (22 kDa after N-glycanase digestion), an amino acid sequence of a 22 kDa peptide produced by in vitro translation of poly-A RNA from MDA-MB-231 cells, and produces the same pattern as the translation product of the MDA-MB-231 cells upon hydrolysis with Staphylococcus aureus VB protease or elastase. (I) is useful for stimulating the growth of normal cells an inhibiting the growth of cells which overexpress the oncogene exbB-2 product of the growth of cells which overexpress the oncogene exbB-2 product of the growth of cells which overexpress the oncogene exbB-2 product of the growth of cells which overexpress the oncogene exbB-2 product of the growth of cells which overexpress the oncogene exbB-2 product of the growth of cells which overexpress the oncogene exbB-2 product of the growth of cells which overexpress the oncogene exbB-2 product of the growth of cells which overexpress the oncogene exbB-2 product of the growth of cells which overexpress the oncogene exbB-2 product of the growth of cells which overexpress the oncogene exbB-2 product of the growth of cells which overexpress the oncogene exbB-2 product of the growth of cells which overexpress the oncogene exbB-2 product of the growth of cells which overexpress the oncogene exbB-2 product of the growth of cells which overexpress the order of the growth of cells which overexpress the growth of cells which cells which overexpress the growth of cells which cells which overexpress the growth of cells which overexpress the growth of cells which cel

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Matches 5
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25-MAY-1990;
14-JAN-1991;
22-APR-1992;
29-APR-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mab 4D5-dependent inhibition of erbB-2-overexpressing cells, induces differentiation of erbB-2-overexpressing cells and stimulates phosphorylation of epidermal growth factor receptor (EGFR) in EGFR-expressing cells. The specification describes an antibody that reacts specifically with the gp30 protein, but does not cross react TGF-alpha, EGF, amphiregulin or HB-EGF. The antibody can be used to detect the 30 kD erbB-2 ligand (gp30) in serum or urine samples as a prognostic/diagnostic marker for tumour progression.
                                                                                                                                 Novel growth factor ligand useful cell and inhibiting the growth of oncogene erbB-2 product .
                                                                                                                                                                                                                                                                                                                                                                                                       Adenocarcinoma; gp30; gp30/alpha1; heparin-Sepharose binding protein; oncogene erbB-2; EGFR; epidermal growth factor receptor; cancer; diagnostic marker; tumour progression; breast cancer; prostate cancer;
                                                                                                             Example 20; Fig 17b; 61pp;
                                                                                                                                                                             WPI; 2000-270163/23.
                                                                                                                                                                                                                                                                                                                                                        US6040290-A
                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
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                                                                                                                                                                                                                                         24-JUL-1992;
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                                                                                                              English
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Pred.
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                                                                                                                                             stimulating cells which
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                                                                                                       regulating transcription. They are produced by recombinant DNA methods, by peptide synthesis or by enzymatic cleavage of RIZ. RIZ or its active fragments (see also R92107-09) can be obtd. by recombinant DNA methods, and used to identify agents that modulate cell proliferation and thereby treat tumour growth or
                                                                                                                                                                                                                                                                              Nucleic acid encoding mammalian retinoblastoma protein-interacting zinc finger - used to identify cell proliferation modulating agents for treatment of tumours, esp. neuroblastoma and melanoma, also used
                                                                                                                                                                                                                                                                                                                                                                                                                     06-MAR-1995;
18-AUG-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    diagnosis; therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cell proliferation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human RIZ cr2 fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19-MAY-1996
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                                                                                                                                                                                                   Active fragments of mammalian retinoblastoma protein-interacting zinc finger (RIZ), such as rat RIZ cr2 fragment (R92105) and
                                                                                                                                                                                                                                          Claim 19; Page 102; 142pp; English.
                                                                                                                                                                                                                                                                                                                                         WPI; 1996-151371/15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-AUG-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Retinoblastoma protein-interacting zinc finger; RIZ;
                                                                  Sequence
                                                                                                                                                                         human RIZ cr2 fragment (R92106), bind to retinoblastoma, interact with transcription factors and can be involved in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-FEB-1996
                                                                                             neurodegenerative disorders.
                                                                                                                                                                                                                                                                     for cancer diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                           (LJOL-) LA JOLLA CANCER RES FOUND
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94US-0292683.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      transcription
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tumour; cancer; neuroblastoma; melanoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        39.78;
            38.4%;
Score 28; DB Pred. No. 53; 2; Mismatches
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            . 53;
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Query Match
Best Local Similarity
Matches 4; Conserv
                                                                                                                                                                                                                   The wild-type NF is pref. NGF, BDNF, NT-3 or NT-4. In the 30-34 region, the modifications are pref. at Lys32 (or Arg32 in NT) and/or Lys34; in the 93-98 region, Lys95 is partic. replaced by Ala. Esp. for NT-3, Arg32, His34, Asn93 and/or Asn94; for BDNF, Lys95, Lys96 and/or Arg97, and for NT-4 Glu94 and Arg96 are replaced. The mutants differ from wild-type NF as regards receptor binding affinity and specificty, esp. they can bind to trk receptor but not to p75NGFR. Modifications in the 25-36 amino acid region improve stability.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               comparison of NGF genes from different species has revealed clusters of amino acid residues which are highly conserved across different gps. of vertebrates (rat, mouse, human, bovine, guinea pig and chicke NGF: R41747; xenopus NGF: R41748; snake NGF: R41749; rat BDNF: R41750; rat NT-3: R41751; and xenopus NT-4: R41752).

New mutant neurotrophic factor (NF) comprises a wild-type NF having, as modification, replacement of one or more positively charged amino acids, in the amino acids regions 30-34 or 93-98, with uncharged or negatively charged amino acids, so that the mutants have reduced ability to bind to p75NGFR (a transmembrane glycoprotein which binds NGF with low affinity), c.f. wild-type NF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New mutant forms of neurotrophic factor of increased stability have specific positively charged aminoacid(s) replaced, showing more selective binding but equiv. biological activity
                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           06-MAR-1992;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       neurotrophin; NT; p75NGFR; receptor; transmembrane glycoprotein;
rat; mouse; human; bovine; guinea pig; chicken;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nerve growth factor; NGF; brain-derived neurotrophic factor; BDNF;
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PERSSON H B.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Moliner CFI;
                                                                                                                                                              ΑĀ;
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                                    38.4%;
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                                    Score 28; Pred. No.
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Y30504
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Best Local S
Matches 4
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15-APR-1988;
11-OCT-1994;
                                                                                                                                                                                                                                                                                                               Y30496-513 represent amino acid substitution variants of a major epitopic region 2 of the CD2 protein. The peptides were acquired by mutant selection. The CD2 protein and epitopes are used to demonstrate the method of the invention. The specification describes a rapid mutational analysis method for mapping protein epitopes and binding domains, by identifying substitution mutations that result in the loss of binding capacity. The method may be used for mapping protein epitopes, antigenic domains and binding sites. It has been used for mapping binding sites for sixteen anti-CD2 and anti-CD4 monoclonal antibodies. The method is especially useful for ligand binding site studies for the design of
                                                             R41613
                                                                                                                                                                                                                                                                          new ligands and drugs.
note: This sequence does not appear in the specification it was created using information provided.
            25-MAR-1994
                                     R41613;
                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page -; 27pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rapid mutational analysis method for mapping protein epitopes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1999-550602/46.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11-OCT-1994;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CD2 protein; rapid mutational analysis method; protein epitope mapping; binding domain mapping; binding capacity; anti-CD2 antibody; anti-CD4 antibody; ligand binding site study.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mutant sequence of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15-NOV-1999 (first entry)
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                                                                                                                                                         5 CDERGKMI 12
                                                                                                                               cdtkgknv 12
                                                              standard;
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                                                                                                                                                                                                                                                   15 AA;
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           (first entry)
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94US-0320663.
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                                                              Protein;
                                                                                                                                                                                              38.4%;
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                                                              B
                                                                                                                                                                                Score 28; DB
Pred. No. 74;
2; Mismatches
                                                                                                                                                                                                            20;
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RESULT
R41624
ID R4
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Best Local :
Erabutoxin; thrombin; receptor; inhibitor; peptide; TRIP; septicemia; fusion protein; plasmid; PIII; phagemid vector; pTZ19R; syngene; fibrinogen; coagulation; platelet activation; reperfusion damage;
                                                                                                                                                                                  25-MAR-1994
                                                                                                                                                                                                                                                                                                     R41624 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         inhibiting thrombin-induced smooth muscle cell proliferation. They can be used for treating and preventing neurodegenerative disease, treating and preventing bone resorption (eg. in osteoporosis), treating and preventing thrombin-induced inflammation, eg. in adult respiratory distress syndrome, septic shock, septicemia and reperfusion damage) and for inhibiting platelet-dependant thrombosis fusion proteins containing these sequences may also act as thrombin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The sequences given in R41583-633 are thrombin receptor inhibitor peptides (TRIPs). TRIPS competitively bind to and inhibit the thrombin receptor without afecting thrombins activities toward fibrinogen and other proteins involved in coagulation. They can be used for inhibiting thrombin induced platelet activation and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Erabutoxin; thrombin; receptor; inhibitor; peptide; TRIP; septicemia; fusion protein; plasmid; PIII; phagemid vector; pTZ19R; syngene; fibrinogen; coagulation; platelet activation; reperfusion damage; neurodegenerative disease; bone resorption; osteoporosis; thrombosis; inflammation; adult respiratory distress syndrome; septic shock.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New thrombin receptor antagonist used to inhibit thrombin-induced
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   receptor antagonists.
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                                                                                                                                                                                                                                                                                                        Protein; 9
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Pred. No. 2.1e+05;
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RESULT 24
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                                                                                                                                                                                                                                                                                                                                                                                                             peptides (TRIPs). TRIPS competitively bind to and inhibit the thrombin receptor without afecting thrombins activities toward fibrinogen and other proteins involved in coagulation. They can be used for inhibiting thrombin-induced platelet activation and inhibiting thrombin-induced smooth muscle cell proliferation. They can be used for treating and preventing neurodegenerative disease, treating and preventing bone resorption (eg. in osteoporosis), treating and preventing thrombin-induced inflammation, eg. in adult respiratory distress syndrome, septic shock, septicemia and reperfusion damage) and for inhibiting platelet-dependant thrombosis. Fusion proteins containing these sequences may also act as thrombin
                                                                                                                                                    W41465;
                                                                                                                                                                            W41465 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The sequences given in R41583-633 are thrombin receptor inhibitor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New thrombin receptor antagonist peptide(s) and fusion proteins used to inhibit thrombin-induced platelet aggregation and smooth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1993-303456/38.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      neurodegenerative disease; bone resorption; osteoporosis; thrombosis; inflammation; adult respiratory distress syndrome; septic shock.
EP818467-A2
                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 48; Page 48; 95pp; English.
                                                  Nematode; alpha 3-tubulin; aligned peptide array; protein binding site; protein interaction site; ligand detection.
                                                                                            Fragment of nematode alpha 3-tubulin.
                                                                                                                        05-JUN-1998
                                                                                                                                                                                                                                                                                                                                                                                                    receptor antagonists.
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                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                     (first entry)
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                                                                                                                                                                                                                                                                                                                     37.0%;
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                                                                                                                                                                               10
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                                                                                                                                                                                                                                                                                                                     Score 27; DB 14;
Pred. No. 2.1e+05;
                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                Length 9;
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RESULT
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Best Local Similarity
Matches 4; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This sequence represents a fragment of alpha 3-tubulin derived from a nematode. This sequence was used as a part of an aligned peptide array of the invention. The aligned peptide array comprises, as separate elements, peptide segments obtained by dividing the amino acid sequence of a protein into sequence segments of any suitable length and of any suitable preferably with the amino acid sequences of the sequence segments, preferably with the amino acid sequences of the peptide segments expressing the amino acid sequence of the protein. The peptide array can be used in a method for the detection of a binding or interaction site of a protein; in a method for the detection of a ligand for a protein; in a method for the detection of a ligand for a protein; in a method for the detection of a ligand for the design of a protein. Using the information from the above methods, ligands detected by them can be modified, or designed. The peptide array can be used in enzyme immunoassay method, represented by ELIAR. The array can be used in enzyme immunoassay method, represented by ELIAR. The array can
                                                                                                                                                                                                                                                                                                                                Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    W47272 standard; peptide; 10 AA.
23-APR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                   Immunomodulator; Class I HLA-B alpha-1 domain; inhibition; transplant rejection; treatment; autoimmune disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 W47272;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 be used in a viroimmunoassay method, a metalloimmunoassay method, a fluoroimmunoassay method or, a radioimmunoassay method.
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                                                         27-NOV-1997.
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97WO-US06705.
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    D-isomer"
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Search completed: February 5, 2001, 10:59:11 Job time: 634 sec
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                                                                                                                                                    Query Match 37.0%; Score 27; DB 19; Length 10; Best Local Similarity 62.5%; Pred. No. 73; Matches 5; Conservative 2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                       The present sequence is an immunomodulatory peptide, which comprises a Class I HLA-B alpha-1 domain sequence. It can be used in a pharmaceutical composition together with a subtherapeutic dose of an immunosuppressant, to extend the period of acceptance of a transplant from a major histocompatibility complex (MHC) unmatched donor, i.e. to inhibit transplant rejection. It can also be used in the treatment of autoimmune diseases.

Peptides using the D-form amino acids are more effective immunomodulators than their diastereomers or enantiomers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1998-018220/02.
                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 10; Page 36; 41pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel immunomodulatory peptide-type compound - useful for inhibiting transplant rejection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Clayberger C, Krensky AM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (STRD ) UNIV LELAND STANFORD JUNIOR.
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                                                                                   1 ILIKCDER 8 :||: ||| 3 11irlder 10
                                                                                                                                                                                                                                           10 AA;
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Result
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                 Peptide derived fr 55 kD Glutamic acid deca GAD65 fragment, pe Glutamic acid deca GAD65 fragment, pe Human glutamic aci 5 kD Glutamic aci 55 kD Glutamic aci 7 munour supressor g peptide derived fr 65 kD Glutamic aci 55 kD Glutamic aci 7 munour supressor g peptide derived fr 65 kD Glutamic aci 55 kD Glutamic aci
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er	T cell epitope/MHC	Platelet aggregati	factor	factor	fact	s zin	P. haemolytica ygj	H. influenzae ygjD	crete	/hich	in pept:	tylchc	Cyclic peptide or	microtubul	æ	Alpha D peptide de	cha	RGD-containing pep	g	Immunomodulatory p	Fragment of nemato	•	Synth	Mutant sequence of	NT-4	o	ы	Ω	an breast o	met-NDF-beta1(177-	-alpha2(177-24	Clotting factor VI

ALIGNMENTS

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RRESULT
R76642
ID R7
XX R7
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XX O5
DT O5
DT O5
XX DE Pe
XX DE DE XX
XX DE DE XX
XX DE DE Z7
XX DE DE Z7
                   PR XXX PR
Antigen-specific activated T-lymphocytes and their detection interaction with inventive peptide(s) of peptide-MHC complexes; useful in diagnosis of e.g. diabetes and auto:immune diseases
                                                                                                                                                                                                                                                                                     Albert W, Dornmair K, Stahl P, Schendel D;
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(BOEF ) BOEHRINGER MANNHEIM GMBH.
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20-JAN-1994;
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94DE-4401629.
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diabetes; T-cell subpopulation; detection; antigen production; diagnosis; autoimmune disease. Peptide derived from human glutamic acid decarboxylase 1. 05-MAR-1996 R76642;

(first entry)

R76642 standard; peptide; 14

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WINGSOLD WIN
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAD; 65 kD; human; glutamic acid decarboxylase; autoreactive; diagnosis; insulin-dependent diabetes mellitus; IDDM; cell-mediated disease; predisposition; autoimmune; tumour; rheumatoid arthritis; multiple sclerosis.
                                                     W18842-70 are peptide fragments of the 65 kD human glutamic acid decarboxylase (GAD). The fragments are autoreactive substances used for disense of insulin-dependent diabetes mellitus (IDDM). The diagnosis is determined by using a claimed method for diagnosis of cell-mediated diseases or a predisposition to cell-mediated diseases, which is effected by administering an autoreactive substance intradermally and establishing the diagnosis on the basis of the occurrence or lack of a positive reaction at the site of administration. The method is used for diagnosis of autoimune and tumour diseases, preferably T-cell-mediated diseases such as rheumatoid arthritis, multiple sclerosis and especially IDDM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic
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                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 11;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-JUL-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                               Fig 1; 12pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Endl J, Ganz M,
P, Stahl P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            for diagnosis of cell-mediated diseases, esp. intradermal admin. of auto:reactive substances
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14 AA;
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Pred. No.
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Y59553 ID Y XX AC Y AC Y

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Best Local Similarity

Matches 14; Conserv
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                                                                                                                      fragments described in R72261-R72298 were derived. These from be used to detect autoantibodies against GAD, e.g. to deand treat GAD-related autoimmune disorders, such as insuling
                                                                                                                                          Q86481 and Q86482 encode R71733 and R79105, rat and human glutamic acid decarboxylase (GAD65) respectively, from which the GAD65 fragments described in R72261-R72298 were derived. These fragments
                                                                                                                                                                                                        antibodies, hybridoma(s)
                                                                                                                                                                                                                New polypeptide fragments of glutamic acid decarboxylase - for diagnosis and treatment of auto:immune disease, esp. insulin dependent diabetes, also related nucleic acid, vectors,
                                                                                                                                                                                                                                                          WPI;
                                                                                                                                                                                                                                                                               Clare-Salzler MJ,
                                                                                                                                                                                                                                                                                                  (REGC ) UNIV CALIFORNIA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                      Glutamic acid
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                                                                                                             dependant
                                                                                                                                                                                   Claim 1; Page 76; 100pp; English
                                                                                                                                                                                                                                                                                                                                            24-AUG-1994;
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ilikcdergk
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                                                                                                                                                                                                                                                                                                                                                                                                                            decarboxylase; GAD65; auotimmune
dant diabetes mellitus; stiff man
                                                                                                                                                                                                                                                                                                                                                                                                                                                          decarboxylase
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          (GAD65) fragment.
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Pred. No. 4.1
0; Mismatches
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                                                 DB 16;
0.0027;
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Listing first 45 summaries
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Perfect score:
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1: /SIDS1/gcgda
2: /SIDS1/gcgda
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72.6
72.6
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Gapop 10.0 , Gapext 0.5
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73
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Copyright (c) 1993 - 2000 Compugen Ltd
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W18850
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                 Peptide derived fr 65 kD Glutamic acid deca Glutamic acid deca GAD65 fragment, pe Glutamic acid deca GAD65 fragment e pe Human glutamic acid 5 kD Glutamic acid Tumour supressor g peptide derived fr kD Glutamic acid kD Glutamic acid skD Glutamic acid skD Glutamic acid skD Glutamic acid
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Carbastatin-like p
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NGF derived struc	R837	16	10	•	25	45
T cell epitope/MHC		20	9	34.2	25	44
Platelet aggrega	W156	18	9	٠.	25	43
Clotting factor VI		20	00		25	42
factor		20	8		25	41
factor		20	∞	٠.	25	40
s zinc		20	24	5	26	39
P. haemolytica ygj		21	23	5	26	38
u		21	23	5	26	37
Human secreted pro		20	21	5	26	36
Peptide which bind		18	20	5	26	35
I domain peptide		20	17	5	26	34
Acetylcholine-bind		20	13	5	26	33
Cyclic peptide or		18	12	Ģ	26	32
		19	7	5	26	31
		21	22	7.	27	30
D peptide	Y98327	21	21	7	27	29
otassium o		20	15	7.	27	28
RGD-containing pe		20	13	7.	27	27
Sequence which cor		N	13	7.	27	26
Immunomodulatory		19	10	7.	27	25
Fragment of nemato		19	10	7.	27	24
		14	9	7	27	23
	R4.1	14	و	.7	27	22
quence		20	15	8	28	21
rved NT-4	R4175	14	12	æ	28	20
a		17	11	8	28	19
Human gp30 protei	Y8189	21	23	9	29	18
Amino acid sequen		20	23	39.7	29	17
n breast o		18	23	٩	29	16
5	R68604	16	15	٩	29	15
NDF-alpha2(177-241		16	15		29	14
Clotting factor	Y08174	20	&	41.1	30	13

ALIGNMENTS

Peptide derived from human glutamic acid decarboxylase 1.

05-MAR-1996 R76642;

(first entry)

R76642 standard; peptide; 14 AA

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RREGULT
RRAGEAL
ID RAC RA
NX R
        PT DR XXX
                                                                                                                                                                                                                                                        Albert W,
Stahl P,
Antigen-specific activated T-lymphocytes and their detection interaction with inventive peptide(s) of peptide-MHC complexes; useful in diagnosis of e.g. diabetes and auto:immune diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DE4418091-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       diabetes; T-cell subpopulation; detection; antigen production; diagnosis; autoimmune disease.
                                                                                                                                                                            WPI; 1995-264505/35.
                                                                                                                                                                                                                                                                                                                                            (ENDL/) ENDL J.
(BOEF ) BOEHRINGER MANNHEIM GMBH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-FEB-1994;
20-JAN-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24-MAY-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27-JUL-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                        Dornmair K,
Schendel D;
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94DE-4401629.
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                                                                                                                                                                                                                                                                                                Endl J, Jung G,
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RESULT
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W18842-70 are peptide fragments of the 65 kD human glutamic acid decarboxylase (GAD). The fragments are autoreactive substances used for decarboxylase (GAD). The fragments are autoreactive substances used for diagnosis of insulin-dependent diabetes mellitus (IDDM). The diagnosis is determined by using a claimed method for diagnosis of cell-mediated diseases or a predisposition to cell-mediated diseases, which is effected by administering an autoreactive substance intradermally and establishing the diagnosis on the basis of the occurrence or lack of a positive reaction at the site of administration. The method is used for diagnosis of autoimume and tumour diseases, preferably T-cell-mediated diseases such as rheumatoid arthritis, multiple sclerosis and especially IDDM.
                                                                                                                                                                                                                                                                                                                                                                         WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
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                                                                                                                                                                                                                                                         Claim 11; Fig 1; 12pp; German.
                                                                                                                                                                                                                                                                                                  Skin test
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20-JUL-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20-JUL-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             23-JAN-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DE19526561-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         multiple sclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               predisposition; autoimmune; tumour; rheumatoid arthritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAD; 65 kD; human; glutamic acid decarboxylase; autoreactive; diagnosis; insulin-dependent diabetes mellitus; IDDM; cell-mediated disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       65 kD Glutamic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-JAN-1998
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                                                                                                                                                                                                                                                                                                                             Skin
                                                                                                                                                                                                                                                                                                                                                                                                                                             Donie F,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (BOEF ) BOEHRINGER MANNHEIM GMBH.
                                                                                                                                                                                                                                                                                                                                                                                                                     Pozzilli P,
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                                                                                                                                                                                                                                                                                                                                                                         1997-088254/09
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                                                                                                                                                                                                                                                                                                                                                                                                                   Endl J, Gar
P, Stahl P;
                                                                                                                                                                                                                                                                                                  for diagnosis of cell-mediated diseases, esp. intradermal admin. of auto:reactive substances
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                                                                                                                                                                                                                                                                                                                                                                                                                                           Ganz
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03-APR-2000

(first entry)

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Matches 10
                                                                                                                                                                                          Q86481 and Q86482 encode R71733 and R79105, rat and human glutamic acid decarboxylase (GAD65) respectively, from which the GAD65 fragments described in R72261-R72298 were derived. These fragments can be used to detect autoantibodies against GAD, e.g. to diagnose and treat GAD-related autoimmune disorders, such as insulin dependant diabetes mellitus or stiff man disease.
                                                                                                                                                                                                                                                                              New polypeptide fragments of glutamic acid decarboxylase diagnosis and treatment of auto:immune disease, esp. insu dependent diabetes, also related nucleic acid, vectors, antibodies, hybridoma(s) etc.
                                                                                                                                                                                                                                                                                                                               WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Glutamic acid decarboxylase; GAD65; auotimmune insulin-dependant diabetes mellitus; stiff man
                    Y59553;
                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                             Claim 1; Page 76; 100pp; English
                                                                                                                                                                                                                                                                                                                                                   Clare-Salzler MJ,
                                                                                                                                                                                                                                                                                                                                                                                         17-SEP-1993;
                                                                                                                                                                                                                                                                                                                                                                                                           24-AUG-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                               23-MAR-1995.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
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                                      Y59553 standard;
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Pred. No.
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Pred.
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0.0027;
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disease.
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                                                                                                                                                                                                                                                                                                                                                                                                        Score
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  protein search, using sw model
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SPTREMBL_15:*
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73
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sp_plant:*
sp_rodent:*
sp_virus:*
sp_vertebrate:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sp_mammal:*
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Q9QUZ1
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052748
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                  Q9TWF7
Q14347
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6627
            Q9uje7 homo sapien
Q9s83 chlamydomon
Q29831 homo sapien
Q9trp0 sus scrofa
P82176 galleria me
O60696 homo sapien
O77604 macaca mula
O77831 cercopithec
O77832 cercopithec
Q9n165 ascaris suu
Q9twf7 entamoeba h
D14347 homo sapien
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077605	077603	077602	Q55093	085524	P71537	041542	041541	Q9S8H1	Q9TRH8	Q38571	Q9TRP2	Q15344	Q55326	Q9UMRO	P79034	018918	Q9UED3	P97146	Q9TV19	077922	Q9TRN3	Q9TRN8	Q61461	Q94373	Q9R573
077605 mandrillus			Q55093 synechocyst	085524 chlamydia t	₽	041542 human immun	O41541 human immun	Q9s8h1 hordeum vul	Q9trh8 oryctolagus	Q38571 bacteriopha		Q15344 homo sapien		Q9umr0 homo sapien	P79034 emericella		Q9ued3 homo sapien	P97146 escherichia	Q9tv19 macaca mula	077922 oreochromis	Q9trn3 sus scrofa		Q61461 mus musculu	3 caenc	Q9r573 nitrosomona

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O52748 PRELIMINARY;
O52748;
O1-JUN-1998 (TrEMBLIEL. 06,
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SEQUENCE
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088222; O1-NOV-1998 (TrEMBLrel. 08, Created)
01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Agata Y., Matsuda E., Shimizu A.;
"Rapid and efficient cloning of cDNAs encoding Kruppel-like zinc finger proteins by degenerate PCR.";
Gene 213:55-64(1998).
EMBL; AB010317; BAA31373.1; -
INTERPRO; IPR000822; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
STRAIN-C57BL6;
STRAIN-98296253; PubMed-9630514;
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22 AA; 2530 MW; 0CBFC69A2066141A CRC64;
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Pred. No. 10;
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Q9QUZ1;
Q1-MAY-2000
Q1-MAY-2000
Q1-OCT-2000
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Q9TRN4;
Q1-MAY-2000 (TIEMBLrel. 13, Created)
Q1-MAY-2000 (TIEMBLrel. 13, Last sequence update)
Q1-JUN-2000 (TIEMBLrel. 14, Last annotation update)
LOW MR ZONA PELLUCIDA BINDING PROTEIN (FRAGMENT).
Sus scrofa (P19).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE-92378826; PubMed-1510840; Parry R.V., Barker P.J., Jones R.; "Characterization of low Mr zone pellucida binding p spermatozoa and seminal plasma."; Mol. Reprod. Dev. 33:108-115(1992). SEQUENCE 15 AA; 1768 MW; 7FA2379E1461610E CRC64;
                                                                                                        Eukaryota; Metazoa; Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sus scrofa (Pig).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Yoon H.-S., Golden J.W.;
Submitted (FEB-1998) to the
EMBL; AF046871; AAC03103.1;
SEQUENCE 17 AA; 1927 MW;
  MEDLINE-96036981;
Rouimí P., Debrauv
                                             SEQUENCE.
                                                                              NCBI_TaxID=10118;
                                                                                                                                                Rattus sp
                                                                                                                                                                      ALPHA CLASS (FRAGMENT).
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101-JUN-1998 (TIEMBLIEL 06, Last
HETEROCYST-INHIBITING SIGNALING
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01-JUN-1998
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Similarity 100.0%;
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    Debrauwer
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(TIEMBLrel. 13, Last sequence update)
(TIEMBLrel. 15, Last annotation update)
GLUTATHIONE S-TRANSFERASE SUBUNIT 2 (EC
                                                                                                                                                                                                                                                                                                PRELIMINARY;
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PubMed=7485987;
ver L., Tulliez
                                                                                                      Chordata;
Rodentia;
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71.4%;
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Pred. No. 1.2e
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1.2e+02;
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Murinae; Rat
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Ol-MAX-2000 (TEMBLrel. 13, Last sequence update)
Ol-MAX-2000 (TEMBLrel. 13, Last annotation update)
RIBULOSEBISPHOSPHATE CARBOXYLASE SMALL SUBUNIT (FRAGMENT).
Triticum aestivum (Wheat).
Eukaryota, Viridiplantae; Embryophyta; Tracheophyta; Spermatophyta;
Magnoliophyta; Liliopsida; Poales; Poaceae; Triticum.
NCBI_TaxID-4565;
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Q41580;
Q1-NOV-1996
Q1-MAY-2000
Q1-MAY-2000
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088231;
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MSZF80-1.
MIS musculus (Mouse).
Mis musculus (Mouse).
Metazoa; Chordata;
Metazoa; Rodentia;
                 STRAIN=C57BL6;

MEDLINE=98396253; PubMed=9630514;

Agata Y., Matsuda E., Shimizu A.;

"Rapid and efficient cloning of cl
finger proteins by degenerate PCR
Gene 213:55-64(1998).
                                                                                                                                                                                   Eukaryota; Metazoa;
Mammalia; Eutheria;
NCBI_TaxID=10090;
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HSSP; P24472; 1GUK.
SEQUENCE 20 AA; 2412 MW; 9498D6E2C030B236
                                                                                                                                            SEQUENCE FROM N.A.
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TISSUE-SEEDLING LEAF;
MEDLINE-84169511; Pubmed-6324097;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15 CEESGK
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K02324; AAA34300.2; -.
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66.7%;
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Fiedder H.R., Schmid R., Leu S., Shavit N., Strotmann H.;
"Isolation of CFOCF1 from Chlamydomonas reinhardtii cw15
terminal amino acid sequences of the CFOCF1 subunits.";
FEBS Lett. 377:163-166(1995).
SEQUENCE 24 AA; 2707 MW; 5CCAE3310F50FB44 CRC64;
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation updat
ATP SYNTHASE DELTA SUBUNIT (FRAGMENT).
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01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
01-MAY-2000 (TREMBLREL. 13, Last annotation update)
DJ620E11.1D (NOVEL HELICASE C-TERMINAL DOMAIN AND SNF2 N-TERMINAL
DOMAINS CONTAINING PROTEIN, SIMILAR TO KIAA0308) (FRAGMENT).
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Mammalia; Eutheria;
NCBI_TaxID=9606;
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Q1-NOV-1996 (TIEMBLIEL 01, CI
01-NOV-1996 (TIEMBLIEL 01, LE
01-MAY-2000 (TIEMBLIEL 13, LE
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Q1-MAY-2000 (TIEMBLIEL. 13, Created)
Q1-MAY-2000 (TIEMBLIEL. 13, Last sequence update)
Q1-JUN-2000 (TIEMBLIEL. 14, Last annotation update)
Q1-JUN-2000 (TIEMBLIEL. 14, Last annotation update)
Q1-JUN-200A PELLUCIDA BINDING PROTEIN (FRAGMENT).
                                                                                                                                                           MEDIINE-92378826; PubMed-1510840;
Parry R.V., Barker P.J., Jones R.;
"Characterization of low Mr zone pellucida bin spermatozoa and seminal plasma.";
Mol. Reprod. Dev. 33:108-115(1992).
SEQUENCE 15 AA; 1525 MW; CC800E1028CF2058
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae;
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"Use of synthetic oligonucleotide probes compleme
"unan HLA-DR alpha and beta as extension primers
5'-specific genomic clones.";
Proc. Natl. Acad. Sci. U.S.A. 80:1531-1535(1983).
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Eukaryota; Metazoa; Chordata; Craniata; V
Mammalia; Eutheria; Primates; Catarrhini;
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Das H.K., Biro P.A., Cohen S.N., Erli
Lawrance S.K., Lemaux P.G., McDevitt
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HLA-DR ALPHA (FRAGMENT).
                                               Score 25; DB
Pred. No. 6.4e
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Pred. No.
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6.4e+02;
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Sus.
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O60696;
O1-AUG-1998 (TREMBLEGL. 0
O1-AUG-1998 (TREMBLEGL. 0
O1-AUG-1998 (TREMBLEGL. 0
TYPE II AF10 PROTEIN (FRA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE-98409271; PubMed-9738891; Wedde M., Weise C., Kopacek P., Franke P., Vilcin "Purification and characterization of an inducibl inhibitor from the hemolymph of greater wax moth mellonella.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  P82176 PRELIMINARY; PRT; 24 AA. P82176; 01-MAY-2000 (TIEMBLrel. 13, Created) 01-MAY-2000 (TIEMBLrel. 13, Last sequence update) 01-MAY-2000 (TIEMBLREL. 13, Last annotation update) METALLOPROTEINASE INHIBITOR (IMPI) (FRAGMENT).
                                                                                                                                                                                                        Homo sapiens (Human).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -1- Eur.
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Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insect
Pterygota; Neoptera; Endopterygota; Lepidoptera; Glossata;
Pyraloidea; Pyralidae; Gallerinae; Galleria.
NCBI_TaxID=7137;
                                                                                                         EMBL; AF060935; AAC16707.1;
NON_TER 1 1
SEQUENCE 20 AA; 2188 MW;
                                                                                                                                            SEQUENCE FROM N.A.
Silliman C.C., McGavran L.,
Leukemia 0:0-0(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
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TISSUE-LARVAL HEMOLYMPH;
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J. BIOCHEM. 255:535-543(1998).

FUNCTION: IT INHIBITS THERMOLYSIN AND THE METALLOPROTEASE OF EUROCITON: IT INHIBITS THERMOLYSIN OR CYSTEINPROTEASE PAPAIN. INDUCTION: BY LIPOPOLYSACCHARIDE (LPS).

PTM: FIVE DISULFIDES BONDS ARE PRESENT.

PTM: THE HEAVY CHAIN MAY BE O-GLYCOSILATED.

MASS SPECTROMETRY: MW-8350; METHOP-MALDI.
                    LIKCDERG
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el. 07, Last annotation update)
(FRAGMENT).
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                                             Score 24; DB 4;
Pred. No. 1.3e+03;
l; Mismatches 3
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                                                                                                                                                                                                          Craniata; Vertebrata; Catarrhini; Hominidae;
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                                                                                                                                                          Miller
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1e+03;
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Cercopithecus mitis.

Cercopithecus mitis.

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Cercopithecidae;

Cercopithecidae;

Cercopithecus.
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                                                                                                                                                                                                                                                                 Harris E.E., Disotell T.R.;
"Nuclear Gene Trees and the Phylogenetic Relationships of the Mangabeys (Primates: Papionini).";
Mol. Biol. Evol. 0:0-0(1998).
EMBL; AF057420; AAC25148.1; -.
EMBL; AF057419; AAC25147.1; -.
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NCBI_TaxID=36225;
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"Nuclear Gene Trees and the Phylogenetic Relationships Mangabeys (Primates: Papionini).";
Mol. Biol. Evol. 0:0-0(1998).
EMBL; AF057416; AAC25144.1; -.
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O1-OCT-2000 (TrEMBLrel. 1
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ASABF-DELTA (FRAGMENT).
Q9TWF7;
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
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01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
01-NOV-1998 (TrEMBLrel. 08, Last annotation updat-
TESTIS SPECIFIC PROTEIN (FRAGMENT).
                                                                                                                                                                                                                                                                                                                            "Ascaris suum asabf-delta gene, exon 2.";
Submitted (JUL-1999) to the EMBL/GenBank/DDBJ
EMBL; AB029815; BAA89496.1; -.
NON_TER 1 1
NON_TER 1 11
SEQUENCE 11 AA; 1187 MW; 8BADDOCD1EAB5861
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Mol. Biol. 0:0-0(1998).
EMBL; AF057418; AAC25146.1; -.
EMBL; AF057417; AAC25145.1; -.
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NCBI_TaxID=9534;
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Eukaryota; Metazoa; Nematoda;
Ascarididae; Ascaris.
NCBI_TaxID=6253;
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Harris E.E., Disotell T.R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Kato Y
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
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Pred. No.
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                                                                                                                                                                                                                                               Score 23;
Pred. No.
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1.6e+03;
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Best Local S
Matches 6
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QSPRT7;
Q1-MAY-2000 (TIEMBLITE1. 13, Cre
O1-MAY-2000 (TIEMBLITE1. 15, Las
O1-OCT-2000 (TIEMBLITE1. 15, Las
MYOTOXIN IV (FRAGMENT).
Bothrops asper (Terciopelo).
Eukaryota; Metazoa; Chordata; C
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Q1-NOV-2000
Q1-OCT-2000
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MEDLINE-85087928; PubMed-6096821;

Arcari P. Martinelli R., Salvatore F.;

"The complete sequence of a full length cDNA for human liver

"The complete sequence of a full denyth cDNA for human liver
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Li E., Yang W.G., Zhang T., Stanley S.L.Jr.;
"Interaction of laminin with Entamoeba histolytica proteinases and its effect on amebic pathogenesis."
Infect. Immun. 63:4150-4153(1995).
SEQUENCE 21 AA; 2309 MW; 8C99CB65F1E7F834 CRC64
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Eukaryota; Entamoebidae;
NCBI_TaxID=5759;
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Eukaryota; Metazoa;
Mammalia; Eutheria;
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Primates;
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DEHYDROGENASE (FRAGMENT)
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1; Mismatc
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Pred. No. 2e+03;
1; Mismatches
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          Craniata;
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2.2e+03;
          Vertebrata; Euteleostomi;
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" Nat. Toxins 3:26-31(1995).

HSSP: P24605; ICLP.
SEQUENCE 23 AA; 2510 ...
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Best Local S
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Best Local :
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Q9R573;
01-MAY-2000
01-MAY-2000
01-OCT-2000
                                                                                                                                        PPI-LIAE OBLY ..... Caenorhabditis elegans. Chromadorea; Eukaryota; Metazoa; Nematoda; Chromadorea; Eukaryota; Metazoa; Caenorhabditis.
                                                                                                                                                                                                          Q94373 PRELIMINARY; PRT; 24 AA. Q94373; O1-FEB-1997 (TIEMBLIEL. 02, Created) O1-FEB-1997 (TIEMBLIEL. 02, Last sequence update) O1-AUG-1998 (TIEMBLIEL. 07, Last annotation update) PP1-LIKE SER/THR PROTEIN PHOSPHATASE (FRAGMENT).
    EMBL; Z7
                         SEQUENCE FROM N.A.
Zeke T., Gergely P.,
Submitted (JUL-1996)
EMBL; Z77734; CAB0129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nitrosomonas europaea.
Bacteria; Proteobacteria; beta subdivision;
Ammonia-oxidizing bacteria; Nitrosomonas.
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HSSP; Q50925; 1FGJ.
SEQUENCE 24 AA; 2663 MW; 7EC6694C
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                                                                                                                               Rhabditidae; Peloderinae; NCBI_TaxID=6239;
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01-MAY-2000 (TrEMBLrel. 13, Last sequence up
01-CCT-2000 (TrEMBLrel. 15, Last annotation
01-CCT-2000 (TREMBLREL).
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Hydroxylamine oxidoreductase
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    CAB01293.1;
                                        Dombrad1 V.;
to the EMBL/GenBank/DDBJ databases
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57.1%;
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Bothrops.
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Pred. No. 2.2e
0; Mismatches
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No. 2.3e+03
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2.2e+03;
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on update)
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Best Local S
Matches 4
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Best Local Similarity
Matches 4; Conserv
                                                                                                                                                                       Sus scrofa (Pig):
Eukaryota; Metazoa; (Manumalia; Eutheria; (NCBI_TaxID=9823;
                                                                                                                                                                                                                                   Q9TRN8 PRELIMINARY; PKY; 15 cm.
Q9TRN8;
Q1-MAY-2000 (TrEMBLrel. 13, Created)
Q1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
Q1-JUN-2000 (TrEMBLrel. 14, Last annotation update)
Q1-JUN-200A PELLUCIDA BINDING PROTEIN HOMOLOG (FRAGMENT).
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SEQUENCE
MEDLINE=92378826; PubMed=1510840; Parry R.V., Barker P.&., Jones R.; "Characterization of low mr zona pellucida binding p spermatozoa and seminal plasma."; Mol. Reprod. Dev. 33:108-115(1992).
SEQUENCE 15 AA; 1593 MW; 176B80F981EF1858 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          O61461 PRELIMINARY; PRT; 25 AA.

O61461;
O1-NOV-1996 (TIEMBLrel. 01, Created)
O1-JAN-1999 (TIEMBLrel. 09, Last sequence update)
O1-MAY-2000 (TIEMBLrel. 13, Last annotation update)
CYTOCHROME P-450B (PHENOBARBITAL-INDUCIBLE) (FRAG
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NON_TER
SEQUENCE
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Mammalia; Eutheria;
NCBI_TaxID=10090;
                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A. MEDLINE-84207435;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; K02409; AAA37510.1; MGD; MGI:88599; Cyp2b13. INTERPRO; IPR001128; -.
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"Characterization of a
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nilarity 66.7%;
Conservative
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7 AA;
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4 AA;
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T., Kessler D.J
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2979
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2743
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Rodentia;
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Pred. No. 2.3e
1; Mismatches
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Pred. No.
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(FRAGMENT).
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                                                 Query Match
Best Local Similarity
Matches 3; Conserv
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Best Local Similarity
Matches 4; Conserv
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Best Local Similarity 57.3
Matches 4; Conservative
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O77922;
O1-NOV-1998 (TrEMBLrel. 08, Last sequence update)
O1-NOV-1998 (TrEMBLrel. 08, Last sequence update)
O1-NOV-1998 (TrEMBLrel. 08, Last annotation update)
O1-NOV-1998 (TREMBLrel. 08, Last annotation update)
MHC CLASS II B LOCUS 16 (FRAGMENT).
Oreochromis niloticus (Nile tilapia) (Tilapia nilotica).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Labroidei;
Cichlidae; Oreochromis.
                                                                                                                                                                                            NON_TER
                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.

MEDLINE-98315113; PubMed-9649539;

Maldaga-Trillo E., McAndrew B., Vincek V., Zaleska-Rutczynska Z.,

Sueltmann H., Figueroa F., Klein J.;

"Linkage relationships and haplotype polymorphism among cichlid Mhc
class II B loci.";

Genetics 149:1527-1547(1998).

EMBL; AF050035; AAC41374.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE.

MEDLINE=92378826; PubMed=1510840;

MEDLINE=92378826; PubMed=1510840;

Parry R.V., Barker P.J., Jones R.;

"Characterization of low Mr zona pellucida binding proteins from boar spermatozoa and seminal plasma.";

Spermatozoa and seminal plasma.";

Mol. Reprod. Dev. 33:108-115(1992).

SEQUENCE 15 AA; 1648 MW; 714A10FDACCA610E CRC64;
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Q9TRN3;
01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
LOW MR ZONA PELLUCIDA BINDING PROTEIN (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sus scrofa (Pig).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Sulna; Suldae; Sus.
NCBI_TaxID=9823;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=8128;
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7 DERG 10
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  1 ILIKCD 6
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16 AA;
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1893 MW; A56619E46BAB5F2D CRC64;
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Pred. No. 2.2e-
1; Mismatches
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                                                    Score 22; DB 7;
Pred. No. 2.3e+03;
2; Mismatches 1
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2.2e+03;
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2.2e+03;
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                                                                                                           Length 16;
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Length 15;

Search completed: February Job time: 1879 sec 5, 2001, 11:27:26

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Maximum DB seq length: 25
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   Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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 protein search, using sw model
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1: pir1:*
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73
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Copyright (c) 1993 - 2000
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A21630
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A60505
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Compugen Ltd.
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                                                                                       hypothetical prote
chaperone, TCP1-re
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Ser/Thr protein ph
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synaptosomal-assoc
lectin, galactose/
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in B -
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A; Reference number: PH1754; MUID:93301585
A; Accession: PH1790
A; Status: preliminary
A; Molecule type: mRNA
A; Residues: 1-16 < POR>

RESULT 1 pH1790 T cell receptor alpha chain V C;Species: Homo sapiens (man) C;Date: 16-Jul-1999 #sequence C;Accession: pH1790 R;Porcelli, S; Yockey, C.E.; J: Exp. Med. 178, 1-16, 1993 A;Title: Analysis of T cell a		4.5	44	43	42	41	40	39	38	37	36	35	34	ယ	32	31	30	
eptor Homo -Jul- Dn: PH S: PH Dd. 170		20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	
alpha ch sapiens 1999 #seq 1790 Yockey, 3, 1-16,		27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	
ain V (man) uence. C.E.;		22	22	21	20	20	20	20	18	18	18	17	16	16	16	16	15	
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region (clone 2PBL V revision 16-Jul-1999 Brenner, M.B.; Balk,	ALIGNMENTS	MXKN2	MXKN1	A60225	PC4387	A60525	A39328	S30381	S18386	S09026	B61110	E59137	PH1637	A44823	\$65709	A36889	PH1788	
RESULT 1 PH1790 C:Species: Homo sapiens (man) C:Species: Homo sapiens (man) C:Species: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 16-Jul-1999 C:Accession: PH1790 C:Accession: PH1790 R:Porcelli, S:; Yockey, C.E.; Erenner, M.B.; Balk, S.P. J. Exp. Med. 178, 1-16, 1993 A;Title: Analysis of T cell antigen receptor (TCR) expression by human peripheral blo		mu-conotoxin GIIIB	mu-conotoxin GIIIA	pyruvate dehydroge	GroEL protein homo	lysozyme (EC 3.2.1	notechis II-5b non	glutathione transf	110K protein - mou	carboxylesterase (68K collagen-bindi	 protein Pfd3 - gol 	Ig H chain V-D-J r	synaptosomal-assoc	major allergen Myr	leu operon leader	T cell receptor al	

synaptosomal-associated protein SNAP-25 peptide 8 - rabbit (fragment) N;Alternate names: superprotein peptide 8 C;Species: Oryctolagus cuniculus (domestic rabbit) C;Date: 31-Mar-1993 #sequence_revision 18-Nov-1994 #text_change 15-Jun-1996 C;Accession: C44803 R;Loewy, A.; Liu, W.S.; Baitinger, C.; Willard, M.B. J. Neurosci. 11, 3412-3421, 1991 A;Reference number: A44823; MUID:92044785 A;Accession: C44823 A;Molecule type: protein A;Residues: 1-14 <LOE> A;Esperimental source: visual tissue A;Note: sequence extracted from NCBI backbone (NCBIP:64253) C;Keywords: membrane trafficking Ş Š A; Status: preliminary g Query Match Best Local S Matches 4 Matches Query Match Best Local Local Similarity nes 5; Conserv 2 LIKCDERGKMI |: ||:|: : G ω CGERGPITPT 12 CDERGKMIPS 14 4; Similarity Conservative Conservative 42.5%; 35.6%; Score 26; DB Pred. No. 3.1e 4; Mismatches Score 31; DB Pred. No. 48; 2; Mismatches 4; 2 . 48; ,.le+02; 3; DB 2; 2 ω Length 14; Length 16 Indels Indels 0, 0, Gaps Gaps 0 0

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C:Accession: S36668
C:Accession: S36668
R:Fujita, Y.; Matsumoto, H.; Takahashi, Y.; Matsubara, H.
submitted to the EMBL Data Library, August 1992
submitted to the EMBL Data Library, August 1992
A;Description: Identification of the nifDK-like gene (ORF467) involved in the biosynthes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          lectin, galactose/N-acetylgalactosamine-specific - rat (fragment)
C;Species: Rattus norvegicus (Norway rat)
C;Date: 28-Feb-1990 #sequence_revision 28-Feb-1990 #text_change 18-Jun-1993
C;Accession: A31516
R;Ii, M.; Kawasaki, T.; Yamashina, I.
Blochem. Blochem. Structural similarity between the macrophage lectin specific for galactose/N-ac A;Reference number: A31516; MUID:88339956
A;Accession: A31516
                                                                                                                                                                                             hypothetical protein 133 - plectonema boryanum (fragment)
C; Species: Plectonema boryanum
C; Date: 31-Dec-1993 *sequence_revision 31-Dec-1993 *text_change 15-Oct-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Genome: nuclear
C;Superfamily: H+-transporting ATP synthase delta chain
C;Keywords: ATP biosynthesis; chloroplast; hydrolase; membrane-associated
              A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-13 <FUJ>
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A;Title: Isolation of CF(0)CF(1) from Chlamydomonas reinhardtii cw15
A;Reference number: S68388; MUID:96128220
A;Accession: S68391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         H+-transporting ATP synthase (EC 3.6.1.34) delta chain, chloroplast - Chlam
N;Alternate names: ATP synthase delta chain
C;Species: Chlamydomonas reinhardtii
C;Species: Chlamydomonas reinhardtii
C;Spate: 04-Dec-1997 #sequence_revision 12-Dec-1997 #text_change 17-Mar-1999
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S68391
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A; Residues: 1-20
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  A; Cross-references:
                                                                            A;Reference number: S36668
A;Accession: S36668
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Matches 4
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EMBL:D12973; NID:g216810;
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0; Mismatches
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Pred. No. 5.
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4.3e+02;
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PIDN:BAA02348.1;
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PID:d1002847; PID:g216811
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A;Status: preliminary
A;Molecule type: protein
A;Molecule sp-17 <FEB2>
C;Superfamily: insulin
C;Keywords: hormone; panci
heat shock protein groEL - Pseudomonas maltophilia (fragment) C;Species: Pseudomonas maltophilia C;Date: 12-Feb-1993 #sequence_revision 12-Feb-1993 #text_change C;Accession: S22677 R;Fowell, S.L.; Lilley, K.S.; Jones, D.; Maxwell, A.
                                                                                                                                                                                                                                                                                                                                                     A; Molecule type: protein A; Residues: 1-19 <TID> C; Keywords: collagen bin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 68K collagen-binding protein, heavy form - chicken (fragments)
C;Species: Gallus gallus (chicken)
C;Date: 03-Feb-1994 #sequence_revision 03-Feb-1994 #text_change 07-Oct-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          insulin chain B - bovine (fragments)
C;Species: Bos primigenius indicus x Bos primigenius taurus (cattle)
C;Species: Bos primigenius indicus x Bos primigenius taurus (cattle)
C;Date: 19-Mar-1997 #sequence_revision 16-Jul-1999 #text_change 16-Jul-1999
C;Accession: S15778; S15779
R;Bergman, T.; Agerberth, B.; Joernvall, H.
FEBS Lett. 283, 100-103, 1991
A;Title: Direct analysis of peptides and amino acids from capillary electrophoresis.
A;Reference number: S15778; MUID:91243852
A;Accession: S15778
A;Status: preliminary
A;Status: preliminary
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A;Title: Identification and distribution of a
A;Reference number: A61110; MUID:93016046
A;Accession: A61110
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R; Tidball, J.G.
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Pred. No. 9.1e+02;
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Mol. Microbiol. 6, 1575-1576, 1992
A:Title: GroEL proteins from three Pseudomonas sp.
A:Reference number: $22676; MUID:92326643
A:Accession: $22877
A:Molecule type: protein
A:Residues: 1-16 <FOW>
C:Genetics:
A:Gene: groEL
C:Keywords: molecular chaperone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               pyruvate kinase (EC 2.7.1.40) - rainbow trout (tentative sequence) (fragment)
C:Species: Oncorhynchus mykiss (rainbow trout)
C:Date: 05-Jun-1987 #sequence_revision 05-Jun-1987 #text_change 31-Mar-2000
C:Accession: B20242
R:Harkins, R.N.; Nocton, J.C.; Russell, M.P.; Fothergill, L.A.; Muirhead, H.
Bur. J. Biochem. 136, 341-346, 1983
A:Title: A comparison of the structure and activity of cat and trout muscle pyruvate kin A; Reference number: A94659; MUID:84028655
A; Accession: B20242
                                                                                                                                                                                                                           submitted to the EMBL Data Library, July 1996 A; Description: The catalytic subunits of Ser/Thr A; Reference number: 222131
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C; Superfamily: pyruva
C; Keywords: ATP biosy
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A; Residues: 1-17
C; Function:
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C:Superfamily: phosphoprotein phosphatase; phosphoesterase
                                                                                                                                                                                                             A; Reference number: A; Accession: T42258
                                                                                                                                                                                                                                                                              C;Date: 03-Dec-1999 #sequence_revision
C;Accession: T42258
R;Zeke, T.; Gergely, P.; Dombradi, V.
                                                                                                                                                                                                                                                                                                                               Ser/Thr protein phosphatase homolog - Caenorhabditis elegans (fragment) C; Species: Caenorhabditis elegans
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A; Residues: 1-24 < ZEK>
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dihydrolipoamide S-succinyltransferase (EC 2.3.1.61) - bovine (fragment)
N;Alternate names: 2-oxoglutarate dehydrogenase complex chain E2; transsuccinylase
C;Species: Bos prinigenius taurus (cattle)
C;Date: 07-Sep-190  #sequence_revision 07-Sep-1990  #text_change 05-May-2000
C;Accession: S00123
R;Bradford, A.P.; Aitken, A.; Beg, F.; Cook, K.G.; Yeaman, S.J.
FEBS_Lett. 222, 211-214, 1987
A;Title: Amino acid sequence surrounding the lipoic acid cofactor of bovine kidney
A;Reference number: S00123; MUID:88005143
A;Rocession: S00123
A;Rocession: S00123
A;Residues: 1-16 <BRA>
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A;Recession: A21630
A;Molecule type: mRNA
A;Residues: 1-25 <STU>
A;Cross references: GB:KO2409; NID:g192896; PIDN:AAA37510.1; PID:g553905
A;Oross references: GB:KO2409; NID:g192896; PIDN:AAA37510.1; PID:g553905
A;Oross references: GB:KO2409; NID:g192896; CTA for residue 5 as Pro, ACC fc
C;Superfamily: human cytochrome P450 CYP2D6; cytochrome P450 homology
C;Keywords: electron transfer; heme; monooxygenase; oxidoreductase; trans
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N;Contains: oxidoreductase (EC 1.-.-)
C;Species: Mus musculus (house mouse)
C;Date: 28-Dec-1987 *sequence_revision
C;Accession: A21630
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A;Title: Further kinetic and molecular ch.
A;Reference number: SO5411; MUID:90026296
A;Accession: S05411
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glutathione transferase (EC 2.5.1.18) 1-2 - rat (fragment)
C;Species: Rattus norvegicus (Norway rat)
C;Oate: 25-Oct-1987 #sequence_revision 25-Oct-1987 #text_change 18-Jun-1993
C;Accession: B24735
R;Mannervik, B.; Alin, P.; Guthenberg, C.; Jensson, H.; Tahir, M.K.; Warholm,
Proc. Natl. Acad. Sci. U.S.A. 82, 7202-7206, 1985
A;Title: Identification of three classes of cytosolic glutathione transferase
A;Reference number: A24735; MUID:88042634
A;Accession: B24735
RESULT 16
PSO371
hypothetical protein (psaC region) - Synechococcus sp. (fragment)
C;Species: Synechococcus sp.
C;Date: 17-Aug-1992 #sequence_revision 17-Aug-1992 #text_change 08-Oct-1999
                                                                                                                                                                                                                                                         A;Experimental source: B lymphocyte C;Superfamily: immunoglobulin V region; immunoglobulin C;Keywords: heterotetramer; immunoglobulin
                                                                                                                                                                                                                                                                                                                                       R:Yamada, M.; Wasserman, R.; Reichard, B.A.; Shane, S.; Caton, A.J.; Rovera, G. J. Exp. Med. 173, 395-407, 1991
A:Title: Preferential utilization of specific immunoglobulin heavy chain diversity and A:Reference number: PT0222; MUID:91108337
A:Recession: PT0248.
                                                                                                                                                                                                                                                                                                                                                                                                                     Ig heavy chain CDR3 region (clone 2-106B) - human (fragment) (;Speciles: Homo sapiens (man) (c;Speciles: Homo sapiens (man) (c;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 06-Jun-1997 (c;Accession: PT0248
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B24735
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F;5/Binding site: lipoamide (Lys) (covalent) #status experimental
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A; Residues: 1-20 < YAM>
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A;Residues: 1-18 <MAN>
C:Superfamily: glutathione transferase
C;Keywords: transferase
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2.1e+03;
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C; Keywords: NAD;
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A; Residues: 1-14 <FRA>
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A; Residues: 1-14 <RHI>
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Biochem. J. 199, 599-602, 1981
A;Title: Amino acid sequence of the tryptic
A;Reference number: A17150; MUID:82182061
A;Accession: A17150
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A;Title: A TCPLethed molecular chaperone from plants refolds phytochrome A;Reference number: S33800; MUID:93288140
A;Accession: S33801
A;Status: prellminary
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R;Rhiel, E; Stirewalt, V.L.; Gasparich, G.E.; Bryant, D.A.
Gene 112, 123-128, 1992
A;Title: The psaC genes of Synechococcus sp. PCC7002 and Cyanophora paradoxa: cloning A;Reference number: JS0694; MUID:92201692
A;Accession: PS0371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      chaperone, TCP1-related - oat
C;Species: Avena sativa (oat)
C;Species: Avena sativa (oat)
C;Date: 02-Dec-1993 #sequence_revision 27-Feb-1997 #text_change 17-Mar-1999
C;Accession: S33801
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                                                                                                                                                                                                                             .; Carrubba, C.; Feingold, D.S.; Ashcom, J.; Franzen, J.S.
199, 599–602, 1981
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Pred. No. 2.3e+03;
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guinea pig (fragment)

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A;Molecule type: protein
A;Residues: 1-20 <BOS-
C;Comment: At least fiver species-independent classes of cytosolic glutathion transferases mitochondrial form are known.
C;Complex: dimer
                                                                                                                                                       R;Bogaards, J.J.P.; van Ommen, B.; van Bladeren, P.J. Biochem. J. 286, 383-388, 1992
A;Title: Purification and characterization of eight glutathione S-transferase A;Reference number: S29097; MUID:92412006
A;Accession: S29100
                                                                                                                                                                                                                                                                      glutathione transferase (EC 2.5.1.18) class mu M2 - golden hamster (fragment) C;Species: Mesocricetus auratus (golden hamster) C;Date: 25-Feb-1994 #sequence_revision 08-Nov-1996 #text_change 07-May-1999 C;Accession: S29100
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S29100
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C;Species: Bacillus cereus
C;Date: 30-Jun-1991 *sequence_revision 30-Jun-1991 *text_change 16-Jul-1999
C;Accession: S09233
R;Palva, A.; Vidgren, G.; Simonen, M.; Rintala, H.; Laamanen, P.
Nucleic Acids Res. 18, 1635, 1990
A;Title: Nucleotide sequence of the tetracycline resistance gene of pBC16 fi
A;Reference number: S09233; MUID:90221899
A;Accession: S09233
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A;Residues: 1-15 <MAT>
A;Residues: 1-15 <MAT>
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A;Residues: 1-15 <MAT>
C;Superfamily: milk fat globule protein; discoldin I amino-terminal homology; EGF
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Biochem. Mol. Biol. Int. 29, 545-554, 1993
A;Title: The major fat-globule membrane proteins, bovine components 15/16 and guinea-pi
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C; Superfamily: ter
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A;Accession: D48394
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C;Date: 19-Nov-1993 #sequence_revision 18-Nov-1994 #text_change 31-Oct-1997
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  A;Description: catalyzes the nucleophilic conjugation of intracellular glutathione
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    a
RESULT 24
A60975
HMG1/2 homolog - axolotl (fragment)
C; Species: Ambystoma mexicanum (axolotl)
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A; Pathway: detoxification; xenoblotics metabolism k; Note: increased hydrophilicity of GSH-conjugates es of damage C; Superfamily: glutathione transferase C; Keywords: dimer; transferase
                                                                                                                                                                                                         R;García-Casado, G.; Armentia, A.; Sanchez-Monge, R.; Sanchez, L.M.; Lopez-Otin, C.; FEBS Lett. 364, 36-40, 1995
A;Title: A major baker's asthma allergen from rye flour is considerably more active t A;Reference number: 855604; MUID:95269763
A;Accession: $65505
                                                                                                                                                                                                                                                                                                  dimeric protein (BDP) - barley (fragment)
c;Species: Hordeum vulgare (barley)
C;Date: 19-Mar-1997 #sequence_revision 25-Apr-1997 #text_change 25-Apr-1997
C;Accession: S65605
                                                                                                                                                                                                                                                                                                                                                                                                                                                片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Cross-references: EMBL:X60828; NID:g43682; PIDN:CAA43219.1; PID:g43683 A;Note: the authors translated the codon GGA for residue 14 as Ala C;Superfamily: tet leader peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-20 <SCH>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R;Schwarz, S.; Cardoso, M.; Wegener, H.C., Antimicrob. Agents Chemother. 36, 580-588, A;Title: Nucleotide sequence and phylogeny A;Reference number: $23742; MUID:92321725, A;Accession: $23742
                                                                                                                                                          A; Molecule type: protein A; Residues: 1-20 <GAR>
                                                                                                                                                                                            A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                          RESULT
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C;Species: Staphylococcus hyicus
C;Date: 19-Feb-1994 #sequence_revision 10-Nov-1995 #text_change
C;Accession: S23742
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C:Date: 31-Dec-1993 #sequence_revision 31-Dec-1993 #text_change 31-Dec-1993
C:Accession: A60975
R:Guillet, F.; Tournefier, A.; Denoulet, P.; Capony, J.P.; Kerfourn, F.; Charlemagne, J.
Biol. Cell 69, 153-160, 1990
A:Title: High levels of HMG1-2 protein expression in the cytoplasm and nucleus of hydrod A:Reference number: A60975; MUID:91265891
A:Accession: A60975
A:Molecule type: protein
A:Residues: 1-21 <GUI>A:Residues: 1-21 <GUI
A:Residues: 1-21 <GUI
A:Resi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     natriuretic peptide type C - chicken
() Species: Gallus gallus (chicken)
C; Date: 17-Apr-1993 #sequence_revision 17-Apr-1993 #text_change 20-Mar-1998
C; Accession: JT0581
R; Arimura, J.J.; Minamino, N.; Kangawa, K.; Matsuo, H.
Biochem. Biophys. Res. Commun. 174, 142-148, 1991
A; Title: Isolation and identification of C-type natriuretic peptide in chicken brain. A; Reference number: JT0581; MUID:91113186
A; Accession: JT0581
A; Molecule type: protein
A; Residues: 1-22 <ARI>A; Rossidues: 1-22 <ARI>A; Residues: 1-22 <ARI>A; Experimental source: brain
C; Superfamily: natriuretic peptide A precursor
C; Keywords: diuretic; hormone; natriuretic; osmoregulation
Search completed: February 5, 2001, 11:10:46 Job time: 1057 sec
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Best Local Similarity 44.4%;
Matches 4; Conservative
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    Mismatches

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      Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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streptomyce	bison bonas	amycolatops	pinus pinas	petromyzon	sus scrofa	ursus arcto	bombyx mori	pseudomonas	zea mays (m	bacillus th	canis famil

ALIGNMENTS

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RESULT 1
PA22_BOTSC
ID PA22_BOTSC
AC P80963;
DT 01-NOV-1997
 Query Match
Best Local Similarity
Matches 5; Conserv
                                                            _BOVIN

CDO2_BOVIN

STANDARD;

PIT: 16 AA.

PIT: 179;

01-JUL-1989 (Rel. 11, Created)

01-JUL-1989 (Rel. 11, Last sequence update)

30-MAY-2000 (Rel. 39, Last annotation update)

DHYDROLIPOAMIDE SUCCINYLTRANSFERASE COMPONENT OF 2-OXOGLUTARATE DEHYDROGENASE COMPLEX (EC 2.3.1.61) (E2) (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                     NON_TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
15-JUL-1998 (Rel. 36, Last annotation update)
15-JUL-1998 (Rel. 36, Last annotation update)
PHOSPHOLIPASE A2 HOMOLOG, MYCYTOXIN II (FRAGMENT).
Bothriechts schlegelii (Eyelash viper).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Lepidosauria; Squamata; Scleroglossa; Serpentes; Colubroidea;
Viperidae; Crotalinae; Bothriechis.
                                                                                                                                                                                                                                                                                                                                                                                                                Bos taurus (Bovine).
Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE.
TISSUE-VENOM;
                                                    DLST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   the venom of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE-97209510; PubMed-9056257;
Angulo Y., Chaves E., Alape A., Rucavado A., Gutierrez J.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Isolation and characterization of a myotoxic phospholipase A2 from the venom of the arboreal snake Bothriechis (Bothrops) schlegelii
                                                                                                                                                                                                                                            4
                                                                                                                                                                                                                                                             7 ERGKMI 12
                                                                                                                                                                                                                                            ELGKMI 9
                                                                                                                                                                                                                                                                                                                                                                                     25
25 AA;
                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                       2725 MW;
 Ćhordata; Craniata; Vertebra
Cetartiodactyla; Ruminantia;
                                                                                                                                                                                                                                                                                                                       31.5%;
                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                        Score 23; DB 1;
Pred. No. 6.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                       C578AB09235EA02A CRC64;
                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25
                    Vertebrata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A
                                                                                                                                                                                                                                                                                                                                       Length 25;
        Pecora;
                                                                                                                                                                                                                                                                                                           Indels
     Euteleostomi;
cora; Bovoidea
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RESULT 3
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Best Local
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                                                                                                                                                                                                                                                                                         Syst. Zool.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         P14539;
01-JAN-1990 (Rel. 13, Created)
01-JAN-1990 (Rel. 13, Last sequence up
15-DEC-1998 (Rel. 37, Last annotation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Glycolysis;
NON_TER
BINDING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bovidae; [1]
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                           Tapirus terrestris (Lowland tapir) (Brazilian tapir).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Perissodactyla; Tapiridae; Tapirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FIBRINOPEPTIDE B.
                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FIBB_TAPTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -
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                                                                                  PROSITE;
                                                                                                                                                                                       -
                                                                                                                                                                                                                                                               "Mammalian phylogeny based on fibrinopeptide amino acid sequences.";
Syst. 2001. 22:590-595(1973).
-i- FUNCTION: FIBRINOGEN HAS A DOUBLE FUNCTION: YIELDING MONOMERS THAT
POLYMERIZE INTO FIBRIN AND ACTING AS A COFACTOR IN PLATELET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ·~
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TISSUE-KIDNEY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
                                                                                                                                                                                                                                                                                                                                                      Neil P.B.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3 IKCDERGKMIPS 14
                                                                                                                   (ALPHA, BETA, & GAMMA), LINKED TO EACH OTHER BY LAWY THE MISCELLANEOUS: CONVERSION OF FIBRINGEN TO FIBRIN IS TRIGGERED THROUGHIN, WHICH CLEAVES FIBRINOPEPILDES A AND B FROM ALPHA & BECHANDS THE N-TERMINAL POLYMERIZATION SITES CHAINS, AND THUS EXPOSES THE N-TERMINAL POLYMERIZATION SITES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SIMILARITY: BELONGS TO SIMILARITY: CONTAINS 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SUBCELLULAR LOCATION: MITOCHONDRIAL.
SIMILARITY: BELONGS TO THE 2-OXOACID DEHYDROGENASE FAMILY
SIMILARITY: CONTAINS 1 LIPOYL-BINDING DOMAIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUBUNIT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COFACTOR: THE E2 COMPONENT CONTAINS ONE COVALENTLY-BOUND LIPOYI
                                                                                                                                                                                                                          SUBUNIT: HEXAMER CONTAINING 2 SETS OF 3 NONIDENTICAL CHAINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IETDKTSVQVPS 12
                                                          coagulation; Plasma;
                        ONSIDE CONSTRUCTION OF THE CONSTRUCTION OF THE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bovinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IPR003016;
  19
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AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LIPOYL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PubMed=3115829;
2226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1643 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30.1%;
  W.
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                                                                                                                                                                                                        LINKED TO EACH OTHER BY DISULFIDE BONDS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 22;
Pred. No.
FCEA265C35E99627 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           E34CD29B86B3239D CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .on update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Lipoyl; Mitochondrion
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                                                  \mathcal{T}_{\underline{s}}
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SENDER REPRESENTATION OF THE PROPERTY OF THE P
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LPTR_BACST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT
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                                                                                                                                                                                                                                                                                                  EMBL;
                                                                                                                                 Leader peptide; A SEQUENCE 20 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the EM the European Bioinformatics Institute. There are no restr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Staphylococcus hyicus.
Plasmid pTHT15, Plasmid pBC16, and Plasmid Bacteria; Firmicutes; Bacillus/Clostridium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-NOV-1988
01-FEB-1995
                                                                                                                                                                                                PIR: S09233; LFBSTU.
PIR: S23742; S23742.
                                                                                                                                                                                                                                                                      EMBL;
                                                                                                                                                                                                                                                                                                                                                                        EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                   or send
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Schwarz S., Cardoso M., Wegener H.C.;
"Nucleotide sequence and phylogeny of the tet(L) tetracycline resistance determinant encoded by plasmid pSTE1 from Staphylococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE=86031344;
Hoshino T., Ikeda
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bacillus stearothermophilus, Bacillus cereus,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-NOV-1988
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Palva A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE-90221899;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gene 37:131-138(1985).
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IMAGENTINE=86031344; PubMed=2996983;

INSMINE=86031344; PubMed=860314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  thermophilic Bacillus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bacillus/Staphylococcus group; Bacillus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TETRACYCLINE
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                                                                                                                                                                                                                                                               D00006; BAA00004.1; -. M11036; AAA22850.1; -. X51366; CAA35750.1; -. X60828; CAA43219.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     L Similarity
4; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                               s requires a license agreement (S
an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     non-profit institutions as long as its content
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Agents Chemother. 36:580-588(1992).
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                                                                                                                                 Antibiotic A; 2253 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  09, Last sequence update)
31, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PLASMID-PSTE1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        09, Created)
28.8%;
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                                                                                                                                 resistance; Plasmid
18D0F4A6CA231CA1
Score 21; I
Pred. No. 1.
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Pred. No. 1.
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1.1e+03;
                                  DB 1;
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resistance ge
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Matches

Similarity 3; Conser

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Best Local
Baghdassarian D.;
Baghdassarian D.;
PA transaldolase. An enzyme implicated in crab steroidogenesis.";
Endocrine 5:23-32(1996).
IN CARTOUS TYPES OF CELL MOTILITY AND ARE UBIQUITOUSLY EXPRES:
IN VARIOUS TYPES OF CELL MOTILITY AND ARE UBIQUITOUSLY EXPRES:
IN ALL EUKARYOTIC CELLS.
IN SUBCELLULAR LOCATION: CYTOPLASMIC.
I-- SUBCELLULAR LOCATION: CYTOPLASMIC.
6.8, ITS MW IS: 46 KDA.
ITS MW IS: 46 KDA.
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DISULFID
SEQUENCE 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACT_CARMA STANDARD; PKT; B PA
P80709;
01-OCT_1996 (Rel. 34, Created)
01-OCT_1996 (Rel. 34, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation updat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Arimura J.J., Minamino N., Kangawa K., Matsuo H.;
"Isolation and identification of C-type natriuretic peptide chicken brain.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ANFC_CHICK STANDARD: PRT; 22 AA P21805; P21805; Ol-MAY-1991 (Rel. 18, Created) Ol-MAY-1991 (Rel. 18, Last sequence update) Ol-OCT-1996 (Rel. 34, Last annotation update) C-TYPE NATRIURETIC PEPTIDE (CNP).
                                                                                                                                                                                                                                                                                                                                                                                                 Carcinus maenas (Common shore crab) (Green crab).
Eukaryota; Metazoa; Arthropoda; Crustacea; Malacostraca;,
Eumalacostraca; Eucarida; Decapoda; Pleocyemata; Brachyura;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TISSUE-BRAIN;
MEDLINE-91113186; PubMed-1989595;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gallus gallus (Chicken).
Eukaryota; Metazoa; Chor
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                                                                                                                                                                                                                                                                                                                       SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                       Eubrachyura;
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PROSITE; PS00263; NATRIURETIC_PEPTIDE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INTERPRO; IPRO00663; 
PFAM; PF00212; ANP; 1
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FUNCTION: VASORELAXANT ACTIVITY. HAS A CGMP-STIN
SIMILARITY: BELONGS TO THE NATRIURETIC PEPTIDES
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                                                                                                                                                                                                                                                                                           Somme G., Carpentier G., Granjeon E., Webster S.,
                                                                                                                                                                                                                                                                                                                                                                       Portunoidea; Portunidae; Carcinus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Aves; Neognathae;
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2244 MW;
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Neognathae; Galliformes; Phasianidae; Phasiani
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Pred. No. 1.3e+03;
1; Mismatches 4
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                                                                                                                                                          PROTEINS THAT ARE INVOLVED ARE UBIQUITOUSLY EXPRESSED
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                                                                              THIS PROTEIN IS:
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RESULT 8
LYC_FELCA STANDARD; I
ID LYC_FELCA STANDARD; I
AC P37155;
AC P37155; Rel. 30, Created)
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Best Local S
Matches 3
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P72180;
P72180;
P30-MAY-2000 (Rel. 39, CI6
T 30-MAY-2000 (Rel. 39, La
7 30-MAY-2000 (Rel. 39, La
7 30-MAY-2000 (Rel. 39, La
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Matches
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PROSITE; PS00406; ACTINS_1; PARTIAL.

PROSITE; PS00432; ACTINS_2; PARTIAL.

PROSITE; PS01132; ACTINS_ACT_LIKE; PAR

STRUCTURAL PROTEIN.

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SEQUENCE

8 AA; 976 MW; 1424005AB2C
                                                                                                                                                                                                                                                                                                                                                                                          PROSITE; PS00646; R:
Ribosomal protein.
NON_TER 17
SEQUENCE 17 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      the European Bioinformatics Institute. There are no restrictions use by non-profit institutions as long as its content is in modified and this statement is not removed. Usage by and for comentities requires a license agreement (See http://www.isb-sib.ch/an or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Submitted (JUL-1996) to the EMBL/GenBank/DDBJ databases.
-- FUNCTION: INVOLVED IN THE BINDING OF FMET-TRNA AND, HENCE, IN INITARION OF TRANSLATION (BY SIMILARITY).
-- SIMILARITY: BELONGS TO THE S13P FAMILY OF RIBOSOMAL PROTEINS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.

STRAIN-71.11T;

Perrier V., Boussac A., Meier O., Barzu O., Gilles A.M.;

"Adenylate kinase from P. denitrificans, an iron and zir

protein, catalyzes phosphorylation of AMP and reduction

cytochrome C.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; U64204; AAB06329.1; ALT_INIT.
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3; Conserv
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Proteobacteria;
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Pred. No.
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8.9e+(
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1.5e+03;
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RESULT
FIBB_A
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Best Local S
Matches 4
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COMP. BLOCHEM. Physiol. 95B:773-779(1990).

COMP. BLOCHEM. Physiol. 95B:773-779(1990).

COMP. BLOCHEM. Physiol. 95B:773-779(1990).

FUNCTION: LYSOZYMES HAVE PRIMARILY BACTERIOLYTIC FUNCTION; THOSE IN TISSUES AND BODY FLUIDS ARE ASSOCIATED WITH THE MONOCYTE-MACROPHAGE SYSTEM AND ENHANCE THE ACTIVITY OF IMMUNOACENTS.

CHARLYTIC ACTIVITY: HYDROLYSIS OF THE 1,4-BETA-LINKAGES BETWEEN N-ACETYLL-D-GLUCOSAMINE AND N-ACETYLMDAMIC ACID IN PEPTIDOGLYCAN

N-ACCTYLL-D-GLUCOSAMINE AND N-ACETYLMDAMIC ACID IN PEPTIDOGLYCAN

HETEROPOLYMERS OF THE PROKARYOTES CELL WALLS.

CHERROPOLYMERS OF THE PROKARYOTES CHERROPOLYSIS AND THE PROKARYOTES CHEROPOLYSIS AND THE PROKARYOTES CHERROPOLYSIS AND THE PROKARYOTES CH
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-i- FUNCTION: FIBRINOGEN HAS A DOUBLE FUNCTION: YIELDING MONO.
POLYMERIZE INTO FIBRIN AND ACTING AS A COFACTOR IN PLATEL
                                                                                                                                                                                                                                                                                                                                                                                                                               Mross G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Antilocapra americana (Pronghorn).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalla; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
Antilocapridae; Antilocapra.
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01-FEB-1994 (Rel.
01-FEB-1994 (Rel.
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01-JAN-1990
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INTERPRO; IPRO01916; -.
PFAM; PF00062; 1ys; 1.
PFAM; PF000128; LACTALBUMIN_LYSOZYME; PARTIAL.
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Halliday J.A., Bell K., McKenzie H.A.,
"Feline whey proteins: identification,
characterization of alpha-lactalbumin,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Felis silvestris catus (Cat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Carnivora; Fissipedia; Felidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LYSOZYME
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01-NOV-1997
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                                (ALPHA, BETA, & GAMMA), LINKED TO EACH OTHER BY DISULFIDE BONDS
MISCELLANEOUS: CONVERSION OF FIBRINOGEN TO FIBRIN IS TRIGGERED
THROMBIN, WHICH CLEAVES FIBRINOPEPFIDES A AND B FROM ALPHA & BE
CHAINS, AND THUS EXPOSES THE N-TERMINAL POLYMERIZATION SITES
                                                                                                                                                                                 AGGREGATION.
SUBUNIT: HEXAMER CONTAINING 2 SETS OF 3 NONIDENTICAL CHAINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A60525; A60525.
; P11376; ZEQL.
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)7 (Rel. 35,
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el. 35, Last annotation update)
3.2.1.17) (1,4-BETA-N-ACETYLMURAMIDASE C) (FRAGMENT).
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THE FORMATION
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    THE SOFT CLOT
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Best Local
                                  PIBB_ODOHE STANDARD; PRT; p14476; 01-JAN-1990 (Rel. 13, Created) 01-FEB-1994 (Rel. 28, Last sequence up 01-FEB-1994 (Rel. 28, Last annotation FIBRINOPEPTIDE B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FIBB_MUNMU
P14475;
01-JAN-1990
             Odocoileus hemionus
Eukaryota; Metazoa;
                                                                                                             ODOHE
                                                                                                                                                                                                                                                                    MOD_RES
MOD_RES
NON_TER
SEQUENCE
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PROSITE; PS00514; FIBRIN_AG_C_DOMAIN; PARTIAL.

Blood coagulation; Plasma; Sulfatation.

MOD_RES

MOD_RES

MOD_RES

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21

21

SEQUENCE

21 AA; 2585 MW; FCE6183BE1F31627
                                                                                                                                                                                                                                                                                                                 Blood
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Cervoide
Cervidae; Muntiacinae; Muntiacus.
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01-FEB-1994 (Rel.
01-FEB-1994 (Rel.
   Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                AGGREGATION.

-I- SUBUNIT: HEXAMER CONTAINING 2 SETS OF 3 NONIDENTICAL CHAINS (ALPHA, BETA, & GAMMA), LINKED TO EACH OTHER BY DISULFIDE BONDS
-I- MISCELLANEOUS: CONVERSION OF FIBRINGEN TO FIBRIN IS TRIGGERED THROWSIN, WHICH CLEAVES FIBRINDPEPTIDES A AND B FROM ALPHA & BE CHAINS, AND THUS EXPOSES THE N-TERMINAL POLYMERIZATION SITES
                                                                                                                                                                                                                                                                                                                                                                                                                                   "Anino acid sequence studies on artiodacty fibrinopeptides.";
Arch. Blochem. Biophys. 122:674-684(1967).
-i- FUNCTION: FIBRINGEN HAS A DOUBLE FUNCTION: YIELDING MONOMERS THAT
POLYMERIZE INTO FIBRIN AND ACTING AS A COFACTOR IN PLATELET
POLYMERIZE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mross G.A.,
"Amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FIBRINOPEPTIDE
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3; Conser
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                                                                                                                                                                                                            Conservative
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1 AA;
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28, Last sequence up
28, Last annotation
                                                                                                                                                                                                                                                                      2514
(Mule deer) (Black-tailed deer).
Chordata; Craniata; Vertebrata; Euteleostomi;
Cetartiodactyla; Ruminantia; Pecora; Cervoide
                                                                                                                                                                                                                    27.4%;
50.0%;
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Pred. No.
2; Mismatc
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Pred.
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                                                 update)
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1.8e+03;
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FIBB_RANTA
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Query Match
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Best Local
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MOD_RES
NON_TER
SEQUENCE
                                                                                                                                      INTERPRO;
PROSITE; F
                                                                                                                                                                                                                                                          Blomback B., Blomback M., Grondahl N.J.;
"Studies on fibrinopeptides from mammals.";
"Cata Chem. Scand. 19:1789-1791(1965).
-I- FUNCTION: FIBRINOGEN HAS A DOUBLE FUNCTION: YIELDING MONOMERS POLYMERIZE INTO FIBRIN AND ACTING AS A COFACTOR IN PLATELET
                                                                                                                                                                                                                                                                                                                                                       Rangiler tarandus (Reindeer) (Caribou).
Rangiler tarandus (Reindeer) (Caribou).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Cervoidea;
Cervidae; Odocoileinae; Rangifer.
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01-FEB-1994 (Rel. 28, Last seq
15-JUL-1999 (Rel. 38, Last ann
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Doollttle R.F., Schubert D., Schwartz S.A.;
"Amino acid sequence studies on artiodactyl fibrinopeptides. I.
Dromedary camel, mule deer, and câpe buffalo.";
Arch. Biochem. Biophys. 118:456-467(1967).
-!- FUNCTION: FIBRINOGEN HAS A DOUBLE FUNCTION: YIELDING MONOMER POLYMERIZE INTO FIBRIN AND ACTING AS A COFACTOR IN PLATELET
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                                                                                                                                                         AGGREGATION.

SUBUNIT: HEXAMER CONTAINING 2 SETS OF 3 NONIDENTICAL CHAINS SUBUNIT: HEXAMER CONTAINING 2 SETS OF 3 NONIDENTICAL CHAINS (ALPHA, BETA, & GAMMA), LINKED TO EACH OTHER BY DISULFIDE BONDS. (ALPHA, E GAMMA), CHAINS CONVERSION OF FIBRINGEN TO FIBRIN IS TRIGGERED B THROMBIN, WHICH CLEAVES FIBRINGPEPTIDES A AND B FROM ALPHA & BET CHAINS, AND THUS EXPOSES THE N-TERMINAL POLYMERIZATION SITES RESPONSIBLE FOR THE FORMATION OF THE SOFT CLOT.
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PS00514; FIBRIN_AG_C_DOMAIN; PARTIAL.
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P01523;
21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequence update)
01-FEB-1995 (Rel. 31, Last annotation update)
MU-CONOTOXIN GILIA (MYCTOXIN I) (GEOGRAPHUTOXIN I) (GTX-I)
Conus geographus (Geography cone).
Eukaryota; Metazoa; Mollusca; Gastropoda; Caenogastropoda;
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Cruz L.J., Gray W.R., Olivera B.M., Zeikus
Yoshikami D., Moczydlowski E.;
"Conus geographus toxins that discriminate
muscle sodium channels.";
J. Biol. Chem. 260:9280-9288(1985).
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                                                                             PDB; 11
Sodium
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-1- FUNCTION: MU-CONOTOXINS ACT ON MUSCLE MEMBRANES. THEY I MUSCLE CONTRACTION BY BINDING TO THE VOLTAGE-ACTIVATED
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MEDLINE-91299744; PubMed-2069951;
MEDLINE-91299744, FubMed-2069951;
MEDLINE-91299744; PubMed-2069951;
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MEDLINE-90249506; PubMed-2338142;
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Solution structure of mu-conotoxin
listance geometry calculations.";
EBS Lett. 278:160-166(1991).
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n GIIIA analysed
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                                                                                                                                                                                                                        PDB;
                                                                                                                                                                                                                                                                                                            "Three-dimensional solution structure of mu-conotoxin GIIIB, a specific blocker of skeletal muscle sodium channels."; siochemistry 35:4824-8835(1996)
-i- FUNCTION: MU-CONOTOXINS ACT ON MUSCLE MEMBRANES. THEY BLOCK MUSCLE CONFRACTION BY BINDING TO THE VOLTAGE-ACTIVATED SODIUM
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FEBS Lett.
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Eukaryota; Metazoa; Mollusca; Gastropoda;
Neogastropoda; Conoidea; Conidae; Conus.
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21-JUL-1986 (Rel. 01, Last sequence update)
01-WOV-1997 (Rel. 35, Last annotation update)
MU-CONOTOXIN GIIIB (MYOTOXIN II) (GEOGRAPHUTOXIN II) (GTX-II).
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Nakamura H., Ohizumi Y., Kobayashi J., Hirata Y.;
O acid sequences of homologous hydroxyproline-containing
from the marine snail Conus geographus venom.";
. 155:277-280(1983).
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d P.F., Craik D.J.;
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Yoshikami D.,
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Gray W.R., Olivera B.M., Cruz L.J
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Cruz L.J., Gray W.R., Olivera B.M.,
Yoshikami D., Moczydlowski E.;
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ptide toxins from venomous Conus snails.";
u. Rev. Blochem. 57:665-700(1988).
u. Rev. Blochem. 57:665-700 MUSCLE MEMBRANES. THEY BLOCK
FUNCTION: MU-CONOTOXINS ACT ON MUSCLE MEMBRANES. THEY BLOCK
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LEUR. J. BLOCHEM. 256:404-410(1998).

LEUR. J. BLOCHEM. 256:404-410(1998).

CONTROL INSECT DEFENSE PEPTIDE WITH A BROAD SPECTRUM OF ACTIVITY CONTROL OF ACAINST SAURUS. STOPS RESPIRATION IN BACTERIA BUT CON ACTIVITY AGAINST SAURUS. STOPS RESPIRATION IN BACTERIA BUT CON CONTROL SECRETED.

CON ACTIVITY AGAINST SAURUS. STOPS RESPIRATION IN BACTERIA BUT CON CONTROL SECRETED.

CON ACTIVITY THE LAST THEE CONTROL RESIDUES, THE CONTROL OF SEVEN NOTES ARE IMPORTANT FOR THE ACTIVITY: THE CONTROL RESIDUES AND RESIDUES 8-9 ARE STRETCH OF SEVEN NOTES AND RESIDUES BOR ARE NOTIFICATIVE. SOME TO FROG BREVININS.

REPDB; BTFV, 02-DEC-98.
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DISULFID
SEQUENCE
This SWISS-PROT entry is copyright. It is produced through a collable between the Swiss Institute of Bioinformatics and the EMBL outst the European Bioinformatics Institute. There are no restrictions use by non-profit institutions as long as its content is in modified and this statement is not removed. Usage by and for commodified and this statement is not removed.
                                                                                                                                                       Franklund C.V., Baron S.E., Hylemon P.B.;
"Characterization of the bail gene encoding a bile acid-inducible "NADH:flavin oxidoreductase from Eubacterium sp. strain VPI 12708.";
J. Bacteriol. 175:3002-3012(1993).
-i- PATHWAY: BILE ACID 7-ALPHA-DEHYDROXYLATION PATHWAY.
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Bacteria; Firmicutes; Bacillus/Clostridium
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RESULT 19
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PGK_VIBCH
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P96154;
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or send a
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                                                                                                                           Transferase; Kinase; Glycolysis.
NON_TER 16 16
SEQUENCE 16 AA; 1789 MW; 6BE
                                                                                                                                                      EMBL; U72152; AAC44768.1; -.
INTERPRO; IPRO01576; -.
PROSITE; PS00111; PGLYCERATE_KINASE;
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Bile acid cat
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                                                                                                                                                                                                                                                                                                                                                                                                             Bactería;
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                                       MIDLDLAGKRV
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an email to license@isb-sib.ch).
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                                                                             Conservative
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KINASE (EC 2.7.2.3)
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Pred. No.
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Pred. No. 2.1e+03
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01-DEC-1992 (Rel. 2
01-DEC-1992 (Rel. 2
01-DEC-1992 (Rel. 2
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BACSU
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          This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                      "An ansertion of Escherichia coli transposable element ISIK into site immediately before tetracycline-resistance determinant of Bacillus subtilis chromosomal DNA fragment in cloning in E. coli. FEMS Microbiol. Lett. 63:5-8(1991).
                                                                                                                                                                                            SEQUENCE FROM N.A. MEDLINE-91257555; PubMed-1646143;
                                                                                                                                                                                                                                               MEDLINE-89000797; PubMed-2844262;
Sakaguchi R., Amano H., Shishido K.;
"Nucleotide sequence homology of the tetracycline-resistance
determinant naturally maintained in Bacillus subtilis Marburg 168
chromosome and the tetracycline-resistance gene of B. subtilis
plasmid pNS1981.";
                                                                                                                                                                                                                                                                                                                                                                                        Bacillus subtilis.
Bacteria; Firmicutes;
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01-OCT-1996
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SCharf M., Engels J., Triplen D.;
Primary structures of new 'iso-hirudins'.";
FEBS Lett. 255:105-110(1989).
INHIBITOR: IT FORMS A STABLE NON-COVALENT COMPLEX WITH ALPHA-THROMBIN, THEREBY ABOLISHING ITS ABILITY TO CLEAVE FIBRINGEN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hirudo medicinalis (Medicinal leech).
Eukaryota; Metazoa; Annelida; Clitellata; Hirudinida; Hirudinea;
Arynchobdellida; Hirudiniformes; Hirudinidae; Hirudo.
[1]
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; S05671; S05671.
P; P01050; 6HIR.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
3; Conserv
                                                                                                                                                                                                                                      Biophys. Acta 950:441-444(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17 AA;
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(Rel. 34, Last annotation update)
E RESISTANCE LEADER PEPTIDE.
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24,
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Last annotation updat
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1; Mismatches
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2.2e+03;
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PGK_CLOPA
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_BOVIN STANDARD; PRT; 22 AA.
ACE_BOVIN STANDARD; PRT; 22 AA.
P12820;
01-OCT-1989 (Rel. 12, Created)
01-OCT-1989 (Rel. 12, Last sequence update)
01-OCT-1996 (Rel. 12, Last sequence update)
10-OCT-1996 (Rel. 34, Last annotation update)
2 ANGIOTENSIN-CONVERTING ENZYME, SOMATIC (EC 3.4.15.1) (ACE) (DIPEPTIDYL
3 ANGIOTENSIN-CONVERTING ENZYME, SOMATIC (EC 3.4.15.1) (ACE)
                                                                                                                                                                                                                                                                                                                                                                                       "Two-dimensional gel electrophoresis separation and N-1
sequence analysis of proteins from Clostridium pasteuri
Electrophoresis 19:802-806(1998),
-1- CATALYTIC ACTIVITY: ATP + 3-PHOSPHO-D-GLYCERATE = 1
3-PHOSPHO-P-GLYCEROYL PHOSPHATE.
-1- PATHWAY: SECOND STEP IN THE SECOND PHASE OF GLYCOLY
-1- SUBUNIT: MONOMER (BY SIMILARITY).
-1- SUBUNIT: MONOMER (BY SIMILARITY).
-1- SUBCELLAURA LOCATION: CYTOPLASMIC.
-1- MISCELLAUROUS: ON THE 2D-GEL THE DETERMINED PI OF 1
5.6, ITS MW IS: 56.2 KDA.
-1- SIMILARITY: BELONGS TO THE PHOSPHOGLYCERATE KINASE
-1- SIMILARITY: BELONGS TO THE PHOSPHOGLYCERATE KINASE
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EMBL; X88999; CAA41744.1; -.
EMBL; X88999; CAA41741.1; -.
EMBL; 299124; CAB16115.1; -.
PIR; S04802; LFBSTT.
PIR; S17282; S17282.
SUBTILIST; BG11051; tetL.
Leader peptide; Antibiotic re
SEQUENCE 20 AA; 2298 MW;
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15-JUL-1998
15-JUL-1998
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P81346;
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NON_TER 20 3
SEQUENCE 20 AA; 2
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PROSITE; PS00111; PGLYCERATE_KINASE;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRAIN=W5;
MEDLINE=98291870; PubMed=9629918;
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| :|| :
11 DVKGKRV 17
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Similarity 22.2%;
2; Conservative
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3; Conservative
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36, Last sequence up
36, Last annotation
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2; Mismatches
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Pred. No. 2.6e+03
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RESULT 23
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01-MAY-1992
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Hydrolase; Metalloprotease; Carboxypeptidase; Zinc; Dipeptidase.
NON_TER 22 22
SEQUENCE 22 AA; 2271 MM: 7777777
Chaperone;
NON_TER
SEQUENCE
                                                                                                                                                                                             MEDLINE-87128067; PubMed-3028395;
St Clair D.K., Presper K.A., Smith P.L., Stump D.C., Heath E.C.;
"Bovine angiotensin-converting enzyme: amino-terminal sequence analysis and preliminary characterization of a hybridization-selected
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bovidae; [1]
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Biochem. Biophys. Res. Commun. 141:968-972(1986).
-!- FUNCTION: CONVERTS ANGIOTENSIN I TO ANGIOTENS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bos taurus (Bovine).
Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                          MEDLINE-91329399; PubMed-1678280;
Terlesky K.C., Tabita F.R.;
"Purification and characterization of the chaperonin 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          P25969;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CH10_RHOSH
                                                                            PROSITE;
                                                                                                                          INTERPRO;
                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rhodobacter.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rhodobacter sphaeroides (Rhodopseudomonas sphaeroides)
Bacteria; Proteobacteria; alpha subdivision; Rhodobact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      O KDA CHAPERONIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14
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THE TERMINAL HIS-LEU, THIS RESULTS IN AN INCREASE OF THE
VASOCONSTRICTOR ACTIVITY OF ANGIOTENSIN.
CATALYTIC ACTIVITY: RELEASE OF A C-TERMINAL DIPEPTIDE,
CLICOPEPTIDE-|-XAA-XBB, WHEN XAA IS NOT PRO, AND XBB IS NEITHE
OLICOPEPTIDE-|-XAA-XBB, WHEN XAA IS NOT PRO, AND XBB IS NEITHE
ASP NOR GLU. CONVERTS ANGIOTENSIN I TO ANGIOTENSIN II.
COPACTOR: BINDS TWO ZINC LONS (BY SIMILARITY).
SIMILARITY: BELONGS TO PEPTIDASE FAMILY M2 (ZINC METALLOPROTER
SIMILARITY: BELONGS TO PEPTIDASE FAMILY M2 (ZINC METALLOPROTER
                                                                                                                                               INDUCTION: BY HEAT SHOCK.
SIMILARITY: BELONGS TO THE GROES
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4; Conser
                                                                     00166; cpn10; 1.
PS00681; CHAPERONINS_CPN10;
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                                                                                                                          IPR001476;
     22
                                                Heat shock
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (Rel. 22, Created)
(Rel. 22, Last sequence update)
(Rel. 33, Last annotation update)
ERONIN (PROTEIN CPN10) (PROTEIN GROES) (FRAGMENT).
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Pred. No. 2.8e
0; Mismatches
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                                                                          PARTIAL
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2.8e+03;
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  CRC64;
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Matches 3; Conser
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B_MAIZE

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P80614;

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01-OCT-1996

15-JUL-1999
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15-JUL-1998 (Rel. 3
15-JUL-1998 (Rel. 3
15-JUL-1998 (Rel. 3
                                                                                                                   TOUZET F., RICCARDI F., MORIN C., DAMERVAL C., H
pernollet J.-C., Zivy M., de Vienne D.;
"The maize two dimensional gel protein database:
genome analysis program.";
Theor. Appl. Genet. 93:997-1005(1996).
Theor. Appl. Genet. 93:997-1005(1996).
THE ZINGELLANEOUS: ON THE ZD-GEL THE DETERMINED PROTEIN IS: 6.4, ITS MW IS: 38.8 KDA.

-I- SIMILARITY: BELONGS TO THE ZINC-CONTAINING A
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SEQUENCE
   MAIZE-2DPAGE; P80614; COLEOPTILE MAIZEDB; 123934; -. NON_TER 1 1
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01-OCT-1996 (Rel. 34, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
UNKNOWN PROTEIN FROM 2D-PAGE OF ETIOLATED COLEOPTILE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE-9805508; PubMed-9395320;
Chopin V., Bilfinger T.V., Stefano G.B., Hatiar I., Salzet
Chopin V., Bilfinger T.V., Stefano de biological activity
"Amino-acid-sequence determination and biological activity
a naturally occurring specific chymotrypsin inhibitor from
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Viridiplantae;
Magnoliophyta; Liliopsida;
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Eukaryota; Viridi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Serine protease inhibitor.
DISULFID 3 3
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Rhynchobdellida;
                                                                                                                                                                                                                                                                                                                                                                                    TISSUE-COLEOPTILE;
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-1- SUBUNIT: HETERODIMER OF AN A CHAIN
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Eur. J. Biochem. 249:733-738(1997)
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Metazoa; Annelida; Cli
Netazoa; Glossiphoniidae;
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Pred. No. 2.8e
2; Mismatches
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B1C217D5834F97BB
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dae; Theromyzon.
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SQ
Search completed: February 5, 2001, 11:34:16 Job time: 358 sec
                                                                                                                                          Query Match 24.7%; Score 18; DB 1; Length 15; Best Local Similarity 50.0%; Pred. No. 2.9e+03; Matches 4; Conservative 0; Mismatches 4; Indels
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SEQUENCE 15 AA; 1785 MW; 1978B1D6AB4DDF8D CRC64;
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GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen Ltd.

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Title:
Perfect score:
Sequence:
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Maximum Match 100%
Listing first 45 summaries
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SPTREMBL_15:*

1: sp_archea:*
2: sp_bacteria:*
3: sp_fungl:*
4: sp_human:*
5: sp_invertebrate:*
6: sp_mammaal:*
7: sp_mhc:*
8: sp_organelle:*
9: sp_phage:*
10: sp_plant:*
11: sp_rodent:*
12: sp_vtrus:*
13: sp_vertebrate:*
14: sp_unclassified:*
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1 GMAALPRLIAFTSEHSHFSLKKGAA 25
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Gapop 10.0 , Gapext 0.5
sp_vertebrate:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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18	16	15	25	25	25	25	24	23	23	15	24	23	15	9	24	25	20	25	Length DB
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8 LIAFTSEHSHFSLKKG 23 : 2 LIPFYFRFLDYSLKKG 17	Query Match 25.6%; Score 32; DB 2; Length 25; Best Local Similarity 50.0%; Pred. No. 2.1e+02; Matches 8; Conservative 1; Mismatches 7; Indels 0; Gaps 0;	Hypothetical protein. SEQUENCE 25 AA; 3075 MW; E080E93A41CE396E CRC64;	EMBL; AE000651; AAD08577.1; TIGR; HP1528;	Nature 388:539-547(1997).	"The complete genome sequence of the gastric pathogen Helicobacter pylori.";	c J.C.;	Borodovsky M., Karp P.D., Smith H.O., Fraser C.M.,	., Weidman J.M., Fujii C., Bowman C., Watthey L., Wai	<pre>Berg D.E Gocavne J.D., Utterback T.R., Peterson J.D., Kelley J.M.,</pre>	ichardson D., Dodson R., Khalak H.G.,		R.D., Ketchum K.A., Klenk HP., Gill S.	Tomb JF., White O., Kerlavage A.R., Clayton R.A., Sutton G.G.,	4467; Pu		SEQUENCE FROM N.A.	12	NCBI_TaxID=210;		oteobacteria; epsilon:	Helicobacter pylori (Campylobacter pylori).		OTEIN.	(TrEMBLrel. 14, Last annotation	05,	(TrEMBLrel.		026056 PRELIMINARY; PRT; 25 AA.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

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Matches 6
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Matches 5
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0'brian s.J.;
Nat. Genet. 15:0-0(0).
Nat. Genet. 15:0-0(0).
181266; AAB39359.1; -
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Q40354;
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SEQUENCE
                                                                                            "Synthesis of an opine-like compound, a rhizopine is symbiotically regulated."; symbiotically regulated."; EMBL; M23347; AAA32661.1; ". INTERPRO; IPRO00392; ". IRTERPRO; IPRO00392; ". IPRO1042; fer4_NifH; 1.
                                                                                                                                                                    MEDLINE-89057889; PubMed-2848255;
MEDLINE-89057889; PubMed-2848255;
MEDLINE-89057889; PubMed-2848255;

MEDLINE-89057889; PubMed-2848255;

Meycke N., Trenz S.P., Ratet P., De Bruijn F.J.,
                                                                                                                                                                                                                                                                                                   01-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-NAY-2000 (TrEMBLrel. 13, Last annotation update)
MOS GENE (REQUIRED FOR SYNTHESIS OF L-3-O-METHYL-SCYLLO-INOSAMINE
(3-O-MSI)), 5' END AND PROMOTER REGION (FRAGMENT).
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01-MAY-1997 (TIEMBLIFEL 03, Last
01-MAY-1997 (TIEMBLIFEL 03, Last
10URONATE 2-SULFATASE (FRAGMENT)
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Eukaryota; Viridiplantae; Embryophyta; Tracheophyta; Spermatophyta;

Magnoliophyta; eudicotyjedons; core eudicots; Rosidae; eurosids I;

Fabales; Fabaceae; Papilionoideae; Medicago.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Carnivora; Fissipedia; Felidae;
NCBI_TaxID=37029;
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                                    1.4e+03;
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3.6e+02;
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RA Addms M.D., Celniker S.E., Li P.W., Hoskins R.A., Galle R.F.,
RA Admanatides P.G., Scherer S.E., Li P.W., Hoskins R.A., Galle R.F.,
RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,
RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,
RA Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,
RA Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,
RA Barandon R.C., Rogers Y.-H.C., Blazej R.G., Champe M., Pfeiffer B.D.,
RA Barandon R.C., Baxter E.G., Helt G., Nelson C.R., Miklos G.L.G.,
RA Wan K.H., Doyle C., Baxter E.G., Helt G., Nelson C.R., Miklos G.L.G.,
RA Ballew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M.,
RA Ballew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M.,
RA Beeson K.V., Benos P.V., Berman B.P., Bhandari D., Bolshakov S.,
RA Borkova D., Botchan M.R., Bouck J., Brockstein P., Brottier P.,
RA Cherry J.M., Cawley S., Dahlke C., Davenportt L.B., Davies P.,
RA Cherry J.M., Cawley S., Dahlke C., Davenportt L.B., Davies P.,
RA Cherry J.M., Cawley S., Dahlke C., Davenportt L.B., Davies P.,
RA Cherry J.M., Cawley S., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P.,
RA Dodson K., Doup L.E., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P.,
RA Dodson K., Doup L.E., Downes M., Dugan-Rocha S., Fleischmann W.,
RA Dolchar C., Garg N.S., Gelbart W.M., Glasser K.,
RA Glodek A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M.,
RA Harris N.L., Harvey D., Heiman T.J., Hernandez J.R., Houck J.,
RA Harris N.L., Harvey D., Heiman T.J., Wei M.-H., Ibogwam C.,
RA Kimmel B.E., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z.,
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Best Local S
Matches 7
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Q9VV82;
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Q9TNS5;
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01-MAY-2000
01-MAY-2000
01-JUN-2000
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SEQUENCE
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MEDILINE-93107319; PubMed-1469092;

Weyand C.M., Hicok K.C., Hunder G.G., Goronzy J.J.;

"The HLA-DRB1 locus as a genetic component in giant cell arteritis.

Mapping of a disease-linked sequence motif to the antigen binding si

of the HLA-DR molecule.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID-9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Drosophila melanogaster (Fruit fly).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Endopteryota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
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01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
HUMAN LECCOCYTE ANTIGEN BETA CHAIN DR MOLECULE HLA-DRB1
                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE=20196006;
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Pred. No. 1.6e+03;
Mismatches 2
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A Liu X., Mattei B., McIntosh T.C., McLeod M.P., McPherson D.,

A Merkulov G., Milshina N.V., McDarry C., Morris J., McShrefi A.,

A Mount S.M., Moy M., Murphy B., Murphy L., Muzny D.M., Nelson D.L.,

A Nelson D.R., Nelson K.A., Nixon K., Nusskern D.R., Pacleb J.M.,

Palazzolo M., Pittman G.S., Pan S., Pollard J., Puri V., Reese M.G.,

A Reinert K., Remington K., Saunders R.D.C., Scheeler F., Shen H.,

A Shue B.C., Siden-Kiamos I., Simpson M., Skupski M.P., Smith T.,

Shue B.C., Siden-Kiamos I., Simpson M., Skupski M.P., Smith T.,

A Spier E., Spradling A.C., Stapleton M., Skupski M.P., Smith T.,

Sylrskas R., Tector C., Turner R., Venter E., Wang R., Mang X.,

Wang Z.-Y., Wassarman D.A., Weinstock G.M., Weisenbach J.,

A Walliams S.M., Woodage T., Worley K.C., Wu D., Yang S., Yao Q.A.,

Ye J., Yeh R.-F., Zaveri J.S., Zhan M., Zhang G., Zhao Q., Zheng L.,

A Zheng X.H., Zhong F.N., Zhong W., Zhou X., Zhu X., Smith H.O.,

Gibbs R.A., Myers E.W., Rubin G.M., Venter J.C.,

"The genome sequence of Drosophila melanogaster.";

EMBL; AE003526; AAF49437.1; -.

FIYBASE; FBgn003547; CG18219.
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
LOW MR ZONA PELLUCIDA BINDING PROTEIN (FRAGMENT).
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SEQUENCE 15 AA; 1525 MW; CC800E1028CF2058 CRC64;
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Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
NCBI_TaxID-9823;
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Q1-JUN-2000 (TREMBLEG1. 14, L:
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STRAIN-219, AND 213;
RAUGOIKHENE A., Berg D.E.;
"1ceA2 segment from H. pylori (Alaska strain 219).";
Submitted (JUN-1997) to the EMBL/GenBank/DDBJ databa
EMBL; AF008929; AAC64502.1;
EMBL; AF008928; AAC64500.1;
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Eukaryota; Metazoa;
Mammalia; Eutheria;
NCBI_TaxID=10116;
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MEDLINE=9522657; PubMed=7707437;

BOCOCK C.A., Charnock-Jones D.S., Sharkey A.M., McLaren

Bocock C.A., Charnock-Jones D.S., Sharkey A.M., McLaren

Barker P.J., Wright K.A., Twentyman P.R., Smith S.K.;

"Expression of vascular endothelial growth factor and its

flt and KDR in ovarian carcinoma.";

J. Natl. Cancer Inst. 87:306-516(1995).

EMBL, S77814; AAB34002.1; -.
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Mammalia; Eutheria; Primates;
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SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
Vedoy C.G., Sogayar M.C.;
Vedoy C.G., Sogayar M.C.;
"Cloning of glucocorticoid-regulated sequences using equalizing "Cloning of glucocorticoid-regulated sequences using equalizing subtraction based on selective suppression of polymerase chain reaction in rat C6/ST1 glioma phenotypic reversion.";
Submitted (DEC-1998) to the EMBL/GenBank/DDBJ databases.
EMBL; AF112446; AAD17200.1; -.
    SEQUENCE FROM N.A.
                                          NCBI_TaxID=10345;
                                                               Viruses; dsDNA viruses,
Alphaherpesvirinae; Vari
                                                                                                      Pseudorabies virus.
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Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta; Pterygota; Neoptera; Endopterygota; Diptera; Nematocera; Chironomoidea; Chironomidae; Chironominae; Chironomus.
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icellovirus.
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Pred. No. 1.7e
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                                                                                Herpesviridae;
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Matches 6; Conser
                 Q60839 PRELIMINARY;
Q60839;
01-NOV-1996 (TrEMBLrel. 01, L;
01-NOV-1996 (TrEMBLrel. 07, L;
01-AUG-1998 (TREMBLRel. 07, L;
ALPHA-1-ACID GLYCOPROTEIN-2 ()
Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
NCBI_TaxID=10090;
[1]
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SEQUENCE
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016061;

01-NOV-1996 (TrEMBLrel. 01,

01-JAN-1999 (TrEMBLrel. 09,

01-MAY-1999 (TrEMBLrel. 10,
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MEDLINE-96070924; PubMed=7499261;
MEDLINE-96070924; PubMed=7499261;
Ryan P., Edwards C.O.;
"Systematic introduction of proline in a eukaryotic signal suggests asymmetry within the hydrophobic core.";
J. Biol. Chem. 270:27876-27879(1995).
EMBL; U29124; AAC54534.1;
SEQUENCE FROM N.A.
STRAIN-BALB/C; TISSUE-LIVER.
                                                                                                                                                                                                                                                                                                                      MEDLINE-94006957; PubMed-8403232;
                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
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Rodentia;
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                                    Craniata; Vertebrata;
Sciurognathi; Muridae;
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MEDLINE-94286576; RubMed-8016115;
MARIKIEIJ A.A., Sonnemans M.A.,
                                                                                            SEQUENCE FROM N.A.

MEDLINE-94286576; PubMed-8016115;
Evans D.A., der Kleij A.A., Sonner
Van Leeuwen F.W.;

"Frameshift mutations at two hots
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                                                                                                                                                                                                                   Eukaryota; Metazoa;
Mammalia; Eutheria;
NCBI_TaxID=10116;
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01-NOV-1996 (TIEMBLIEL.
01-NOV-1998 (TIEMBLIEL.
VASOPRESSIN (FRAGMENT):
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Rattus norvegicus (Rat).
Eukaryota, Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                    post-mitotic neurons.";
proc. Natl. Acad. Sci. U.S.A.
EMBL; S71427; AAB31128.1; -.
NON_TER 1
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Proc. Natl. Acad. Sci. U.S.A. 91:6059-6063(1994).
EMBL: S71426; AAB31127.1; -.
  SEQUENCE
                                                                                                                                                                                                                                                                                  Rattus norvegicus (Rat).
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Van Leeuwen F.W.;
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  B1F1E5E4D310F237 CRC64;
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                                                            91:6059-6063(1994)
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3e+03;
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Q9YPJ4;
01-MAY-1999
01-MAY-1999
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01-NOV-1996
01-JUN-2000
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Q16158;
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Viruses; ssRNA positive-strand viruses,
NCBI_TaxID=12470;
                                                                                                            SEQUENCE FROM N.A.
MEDLINE-94238920; PubMed-8182948;
Brennscheidt U., Eick D., Kunzmann
Mertelsmann R., Herrmann F.;
                                                                                                                                                                                                                                                                                                                                                                   "Nucleotide sequence of the capsid pregion of papaya mosaic virus RNA.";
J. Gen. Virol. 69:2369-2373(1988).
EMBL; D00341; BA800247.1;
SEQUENCE 25 AA; 2868 MW; DCCE463
                                                          Leukemia 8:897-902(1994).
EMBL; S70386; ABB30748.1; -.
NON_TER 15 15
SEQUENCE 15 AA; 1772 MW; 883FB769FC6D5A98 CRC64;
                                                                                                                                                                 Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                    C-MYC PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
MEDLINE-88089532; PubMed-
MEDLINE-88089532; PubMed-
                                                                                                                                                                                  Homo sapiens (Human)
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                                                                                               leukemia."
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Zool. Sci.
SEQUENCE
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Q9TWS7;
01-MAY-2000 (TIEMBLIEL 13, Created)
01-MAY-2000 (TIEMBLIEL 13, Last sequence update)
01-UN-2000 (TIEMBLIEL 14, Last annotation update)
44 KDA HEMOGLOBIN B1 CHAIN (FRAGMENT).
Lamellibrachia sp. (Deep-sea giant tube worm).
Eukaryota; Metazoa; Vestimentifera; Basibranchia; Lamellibrachiidae; Lamellibrachia.
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Q9UC55;
                        O9PSI5 PRELIMINARY; PRT; 20 AA. O9PSI5; O1-MAY-2000 (TrEMBLrel. 13, Created) O1-MAY-2000 (TrEMBLrel. 13, Last sequence update) O1-OCT-2000 (TrEMBLrel. 15, Last annotation update CREATINE KINASE (EC 2.7.3.2) (FRACMENT).
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Miyata T., Zheng Y.Z., Sakata T., Kato H.;
"Protein C. Osaka 10 with aberrant propeptide processing: anticoagulant activity due to an amino acid substitution protein C precursor.";
Thromb. Haemost. 74:1003-1008(1995).
SEQUENCE 16 AA; 1875 MW; EBDF581F3D325244 CRC64;
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01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
PROTEIN C OSAKA 10 (FRAGMENT).
Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
    Oncorhynchus
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MEDLINE-96124381;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Takagi T., Ohta S.;
10:141-146(1993).
18 AA; 2192 MW; 039D56A0B814670F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (TrEMBLrel.
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01-0CT-2000 (TrEMBLrel. 1
01-0CT-2000 (TrEMBLrel. 1
01-0CT-2000 (TrEMBLrel. 1
BH2950 PROTEIN.
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01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
01-NOV-1999 (TrEMBLrel. 12, Last annotation update)
11-NOV-1999 (TREMBLREL. 12, Last annotation update)
11-NOV-1999 (TREMBLREL. 12, Last annotation update)
12-NOV-1999 (TREMBLREL. 13, Last annotation update)
13-NOV-1999 (TREMBLREL. 12, Last annotation update)
14-NOV-1999 (TREMBLREL. 12, Last sequence update)
15-NOV-1999 (TREMBLREL. 12, Last sequence update)
16-NOV-1999 (TREMBLREL. 12, Last sequence update)
17-NOV-1999 (TREMBLREL. 12, Last sequence update)
17-NOV-1999 (TREMBLREL. 12, Last sequence update)
18-NOV-1999 (TREMBLREL. 12, Last sequence update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q9W6D7;
MEDLINE-99067015; PubMed-9851690; Grechez-Cassiau A., Bernard M., Ladj "Structural analysis of the chicken
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
STRAIN-C-125 / JCM 9153;
Takami H., Nakasone K., Takaki Y.;
Tsubmitted (MAR-2000) to the EMBL/GenBank/DDBJ
EMBL; AP001517; BAB06669.1; -.
SEQUENCE 22 AA; 2543 MW; 12FC8AD396A81FD8
                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bacillus halodurans.
Bacteria; Firmicutes; Ba
Bacillus/Staphylococcus
NCBI_TaxID=86665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.

MEDLINE=93080727; PubMed=1449598;

White K.C., Babbitt P.C., Buechter D.D.,

"The principal islet of the Coho salmon
the BB isoenzyme of creatine kinase.";

J. Protein Chem. 11:489-494(1992).
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Actinopterygii; Neopterygii; Teleostei; Euteleostei;
Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
NCBI_TaxID-8019;
                                                                                                                                                                                                Gallus.
                                                                                                                                                                  NCBI_TaxID-9031;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q9K8Q3
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15,
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Pred. No. 3.
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                                     Ladjali K., Rodriguez I.R.,
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3.7e+03;
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01-MAY-2000 (TrEMBLrel. 13, Last sequence upda
01-MAY-2000 (TrEMBLrel. 13, Last annotation up
PRORELAXIN H1 PRECURSOR (FRAGMENT).
Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Verteb:
Mammalia; Eutheria; Primates; Catarrhini; Homir
NCBI_TaxID-9606;
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MEDLINE-99084764; PubMed-9869419;

Lazarova G. I., Kubota T., Frances S., Peters J.L., Hughes

Brandstaedter J., Szell M., Matsui M., Kendrick R.E.,

Cordonnier Pratt M.M., Pratt L.H.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Lycopersicon esculentum (Tomato).
Eukaryota; Viridiplantae; Embryophyta; Tracheophyta; Spermatophyta;
Magnoliophyta; eudicotyledons; core eudicots; Asteridae; euasterids
Solanales; Solanaceae; Solanum.
NCBI_TaxID=4081;
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Q1-MAY-1999 (TrEMBLrel. 10,
Q1-MAY-1999 (TrEMBLrel. 10,
Q1-MAY-1999 (TrEMBLrel. 10,
PHYTOCHROME B1.
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Eur. J. Blochem. 258:44-52(1998).
EMBL; AF116455; AAD23444 1; -.
Transferase; Methyltransferase.
Phytochrome.
SEQUENCE 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Characterization of tomato PHYB1 and identification of molecular defects in four mutant alleles."; Plant Mol. Biol. 38:1137-1146(1998). EMBL; AJ002283; CAA05295.1; ...
                                                                                                                                                                                                                                                                                                                                                                        Q9UQJ1
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 24; DB 10;
Pred. No. 4.1e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A6FA32529EDEDCB5 CRC64;
                                                                                                                                                                                      Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                             PRT;
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Eukaryota; Metazoa; Chordata;
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Submitted (JUL-1999) to the
EMBL; AF166119; AAF89582.1;
NON_TER 12 12
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Mammalia; Eutheria; Carnivora; Fissipedia; Canidae;
NCBI_TaxID=9615;
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GenCore version 4.5 Copyright (c) 1993 – 2000 Compugen Ltd.

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4.515 Million cell updates/sec
                                                                                                                                                                    Human glutamic aci 65 kD Glutamic aci deca GAD65 fragment, pe Glutamic acid deca GAD65 fragment, pe Glutamate decarbox
Hepatitis C virus
Antigenic peptide
Hepatitis C virus
HCV NS peptide DP3
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c antimi	ide B-HTLV	t insulin-	r	Yeast insulin-like	peptide	Channel-forming pe	gment of hun	Q		loma virus	nin	polle		Peptide immunogen	indin	Recombinant signal	FIV principal immu	Fragment of human	0 st	Human chorionic go	Human chorionic go		÷	-PX-	3 p20 region	-1 group o	tide. Syn	Sequence 2 encoded	de	atitis C	Helper T-cell clas	toid arth

ALIGNMENTS

R88667 standard; peptide; 25

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Human glutamic acid decarboxylase residues 266-290

detection; antigen production;

05-MAR-1996 (first entry)

R88667;

RRESGG7
RRESGG Antigen-specific activated T-lymphocytes and their detection interaction with inventive peptide(s) of peptide-MHC complexes; useful in diagnosis of e.g. diabetes and auto:immune diseases diabetes; T-cell subpopulation; diagnosis; autoimmune disease. Albert W, Dornmair K, Stahl P, Schendel D; 04-FEB-1994; 20-JAN-1994; DE4418091-A1. Homo sapiens. 24-MAY-1994; 27-JUL-1995 WPI; 1995-264505/35. (ENDL/) ENDL J. (BOEF) BOEHRINGER MANNHEIM GMBH. 94DE-4403522. 94DE-4401629. 94DE-4418091. Endl J, Jung G, Meinl

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RESULT
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                                       diseases or a predisposition to cell-mediated diseases, which is effected by administering an autoreactive substance intradermally and establishing the diagnosis on the basis of the occurrence or lack of a positive reaction at the site of administration. The method is used for diagnosis of autoimmune and tumour diseases, preferably T-cell-mediated diseases
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R88667 is derived from residues 266-290 of human glutamic acid decarboxylase and specifically reacts with a T-cell sub-population isolated from recently diagnosed Type-I diabetics. Pharmaceutical compsns. contg. this peptide and those shown in R88668 and R76642-62, are useful for the diagnosis of a disease or predispositions of immune system diseases, tumours, and autoimmune diseases, including diabetes. The peptides are able to detect specific T-cell subpopulations that
                                                                                                               W18842-70 are peptide fragments of the 65 kD human glutamic acid decarboxylase (GAD). The fragments are autoreactive substances used for diagnosis of insulin-dependent diabetes mellitus (IDDM). The diagnosis is determined by using a claimed method for diagnosis of cell-mediated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1;
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Pozzilli P,
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                             as rheumatoid arthritis, multiple sclerosis and especially IDDM.
                                                                                                                                                                                                                                       test
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Page 13;
                                                                                                                                                                                                                       for diagnosis of cell-mediated diseases, esp. diabetes intradermal admin. of auto:reactive substances
                                                                                                                                                                                         Page 10;
                                                                                                                                                                                                                                                                                                             Endl J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; ilarity 100.0%; Conservative 0;
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                                                                                                                                                                                                                                                                                               Stahl
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                                                                                                                                                                                                                                                                                              Ganz M,
. P;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         decarboxylase peptide fragment VII.
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                                                                                                                                                                                            German.
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                                                                                                                                                                                                                                                                                                            Jung G,
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Pred. No. 4.1e-15;
; Mismatches 0;
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Sequence

25

03-APR-2000 Y59552;

(first entry)

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Best Local S
Matches 16
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Best Local Similarity
Matches 25; Conserv
                                                                                                                                                                        Q86481 and Q86482 encode R71733 and R79105, rat and human glutamic acid decarboxylase (GAD65) respectively, from which the GAD65 fragments described in R72261-R72298 were derived. These fragments can be used to detect autoantibodies against GAD, e.g. to diagnose and treat GAD-related autoimmune disorders, such as insulin dependant diabetes mellitus or stiff man disease.
                                                                                                                                                                                                                                                                               New polypeptide fragments of glutamic acid decarboxylase diagnosis and treatment of auto:immune disease, esp. insudependent diabetes, also related nucleic acid, vectors,
                                                                                                                                                                                                                                                                                                                                              Clare-Salzler MJ, Erlander MG,
                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                 Example 11; Page 76; 100pp; English.
                                                                                                                                                                                                                                                                                                                                                                                           17-SEP-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                24-AUG-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                     23-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO9507992-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R72279
 Y59552 standard;
                                                                                                                                                                                                                                                                       antibodies, hybridoma(s) etc.
                                                                                                                                                                                                                                                                                                                                                                    (REGC ) UNIV CALIFORNIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   insulin-dependant
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                                                                                                Local Similarity
nes 16; Conserv
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                                                       aftsehshfslkkgaa
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                                                                          AFTSEHSHFSLKKGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  standard;
                                                                                                                                                      20 AA;
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                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 decarboxylase (GAD65) fragment.
                                                                                                                                                                                                                                                                                                                                                                                           9305-0123859
                                                                                                                                                                                                                                                                                                                                                                                                                94WO-US09478.
peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   diabetes mellitus;
                                                                                                           100.0%;
   20
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                                                                                                         Score 82; ; Pred. No.
                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAD65; auotimmune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 125;
Pred. No. 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                  Kaufman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    stiff man
                                                                                                         DB 16; 1
9.1e-08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 18;
                                                                                                                                                                                                                                                                                                                                                  ď,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   disorders; disease.
                                                                                                                     Length
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                                                                                                                                                                                                                                                                                            insulin
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Best Local S
Matches 16
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21-SEP-1990;
18-JUN-1991;
                                                                                                                                                                                                                                                                                                                                                                                          This sequence represents a fragment of the glutamic acid decarboxylase 68 (GAD65) protein. The invention relates to a method of ameliorating GAD associated autoimmune disorders by administering a GAD65 peptide to the patient. The method can be used for ameliorating GAD associated autoimmune disorders such as IDDM (insulin dependent diabetes mellitus) and Stiff man disease. GAD65 can also be useful for screening drugs that alter GAD function, for generating monoclonal antibodies and in immunoassays. GAD65 is an effective diagnostic tool for predicting IDDM and the diagnosis is quite easy. It is also possible to obtain much larger quantities of polypeptide via recombinant techniques than are
                                                                     Glutamic acid decarboxylase; GAD65; auotimmune disorders; insulin-dependant diabetes mellitus; stiff man disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 1; Column 42; 61pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (REGC ) UNIV CALIFORNIA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               insulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAD65; glutamic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAD65
                                                                                                          Glutamic acid
                                                                                                                                   13-NOV-1995
                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ameliorating glutamic acid decarboxylase associated autoimmune Ameliorders such as insulin dependent diabetes mellitus and Stiff man
                                                                                                                                                                                   R72278
                                                                                                                                                                                                                                                                                                                                                                                    available
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            disease
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                                                                                                                                                                                                                                                                                              l Similarity 100
16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                    from natural
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                                                                                                                                (first entry).
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                                                                                                          decarboxylase (GAD65) fragment.
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90US-0586536.
91US-0716909.
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                                                                                                                                                                                  Peptide;
                                                                                                                                                                                                                                                                                                        65.6%;
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Pred. No.
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. 9.1e-08;
ches 0;
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Best Local :
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21-SEP-1990;
18-JUN-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q86481 and Q86482 encode R71733 and R79105, rat and human glutamic acid decarboxylase (GAD65) respectively, from which the GAD65 fragments described in R72261-R72298 were derived. These fragments can be used to detect autoantibodies against GAD, e.g. to diagnose and treat GAD-related autoimmune disorders, such as insulin dependant diabetes mellitus or stiff man disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New polypeptide fragments of glutamic acid decarboxylase - for diagnosis and treatment of auto:immune disease, esp. Insulin dependent diabetes, also related nucleic acid, vectors, antibodies, hybridoma(s) etc.
             disorders such as insulin 
disease -
                                                                            Tobin
                                                                                                                                                                                                                                                                       GAD65; glutamic acid decarboxylase 65; autoimmune disorder; IDDM; insulin dependent diabetes mellitus; Stiff man disease; diagnosis
          disease
                    Ameliorating glutamic acid decarboxylase associated autoimmune disorders such as insulin dependent diabetes mellitus and Stiff man
                                                                                                                                                                     09-APR-1997;
                                                                                                                                                                                           07-DEC-1999.
                                                                                                                                                                                                                  US5998366-A.
                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                             therapy.
                                                                                                                                                                                                                                                                                                         GAD65 fragment, peptide #18.
                                                                                                                                                                                                                                                                                                                               03-APR-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                       Y59578;
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                                                                                                   (REGC ) UNIV CALIFORNIA.
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gmaalprliaftse 20
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14; Conserv
                                                                            Kaufman DL,
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90US-0586536.
91US-0716909.
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                                                                             Erlander
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Pred. No.
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3.7e-0
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Example

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61pp; English.

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Best Local
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          Amino acid sequences Y57063-Y57091 are examples of neglected target tissue antigens NTTAs. NTTAs are antigens (whole antigens or fragments) not involved in autoimmunity. These peptides and proteins are used in the method of the invention which involves administering an NTTA as an antigen based immunotherapeutic agent, to a host afflicted with an autoimmune response associated with an autoimmune disease. The immunotherapeutic agent is used to treat autoimmune diseases such as insulin dependent diabetes mellitus, multiple sclerosis, autoimmune thyroiditis, uveoretinitis, rheumatoid arthritis or abnormal inflammatory thyroiditis, uveoretinitis, rheumatoid arthritis or abnormal inflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This sequence represents a fragment of the glutamic acid decarboxylase 65 (GAD65) protein. The invention relates to a method of ameliorating GAD associated autoimmune disorders by administering a GAD65 peptide to the patient. The method can be used for ameliorating GAD associated autoimmune disorders such as IDDM (insulin dependent diabetes mellitus) and Stiff man disease. GAD65 can also be useful for screening drugs that alter GAD function, for generating monoclonal antibodies and in immunoassays. GAD65 is an effective diagnostic tool for predicting IDDM and the diagnosis is quite easy. It is also possible to obtain much larger quantities of polypeptide via recombinant techniques than are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Neglected target tissue antigen; NTTA; autoimmunity; autoimmune response; immunotherapeutic agent; insulin dependent diabetes mellitus; multiple sclerosis; autoimmune thyroiditis; rheumatoid arthritis; uveoretinitis; inflammatory response.
immune responses. The NTTA induces regulatory tolerance by elicitation regulatory T cells among T cells recognizing the NTTA but not
                                                                                                                                                                                                     Disclosure;
                                                                                                                                                                                                                                                      Administration of neglected target tissue antigens to modulate immune
                                                                                                                                                                                                                                                                                        WPI; 2000-052905/04
                                                                                                                                                                                                                                                                                                                       Kaufman
                                                                                                                                                                                                                                                                                                                                                     (REGC ) UNIV CALIFORNIA.
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gmaalprliaftse 20
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ilarity 100.0%;
Conservative (
                                                                                                                                                                                                     Page 23; 79pp; English
                                                                                                                                                                                                                                                                                                                    Tian J,
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                                                                                                                                                                                                                                                                                                                       Olcott
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%; Pred. No. 3.7
0; Mismatches
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3.7e-05;
thes 0;
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                                                                               participating in the immune response. The NTTA are capable of recognition by substantial populations of uncommitted T cells which can be primed, or blased, towards regulatory responses to provide effective treatment. The NTTA are effective in regulating undesirable immune responses even when target determinants used as agents promoting tolerance agents have failed to induce an effective regulatory T cell response. NTTAs as agents promoting tolerance are anticipated to be safer than use of target
                                                            determinants.
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Sequence 20 **A**

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Query
Best I
                                     Matches
                                             Local
 7
         1 GMAALPRLIAFTSE 14
                                                      Match
gmaavprliaftse 20
                                    l Similarity
13; Conserv
                                     Conservative
                                             51.2%;
92.9%;
                                     1; Mismatches
                                             Score 64; DB 21;
Pred. No. 0.00012;
                                      0
                                                     Length
                                      0;
                                      Gaps
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0;

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Helper T-cell class II peptide derived from NS4 protein 16-FEB-1999 W85435 standard; peptide; 15 œ (first entry) A.

acquired immune deficiency syndrome; malari allograft rejection; allergy; Lyme disease; Helper T-cell peptide; human leucocyte antigen; HLA; DR4 DR7; cytotoxic T lymphocyte; CTL; hepatitis; autoimmune post-streptococcal endocarditis; glomerulonephritis; hypersensitivity. malaria; cancer; hepatitis; HLA; DR4w4; DR1; disease;

Synthetic. 23-JAN-1998; 30-JUL-1998 WO9832456-A1 Hepatitis C virus. 98WO-US01373.

Sette A, (EPIM-) EPIMMUNE INC Sidney J, Southwood s

07-FEB-1997; 23-JAN-1997;

97US-0037432 97US-0036713

Composition containing peptide that induces cytotoxic T lymphocyte response, and helper peptide - can bind to human leucocyte antigen alleles, used to treat or prevent cancers, parasitic infections and WPI; 1998-427679/36. autoimmune disease

Disclosure; Page 42; 51pp; English

RESULTATION OF THE PRINCE OF T w85284-451 represent helper T-cell class II peptides, which can bind to the human leucocyte antigens (HLA) DR4w4, DR1 and DR7. The peptides are used in the course of the invention. The specification describes peptides that that induce a cytotoxic T lymphocyte (CTL) response, and T-helper peptides, that are used together to generate a CTL response for the treatment or prevention of viral, fungal, bacterial or parasitic infections (e.g. hepatitis, acquired immune deficiency syndrome or malaria) or cancer (e.g. renal or cervical carcinoma, lymphoma, prostat or condyloma acuminatum). Helper T-cell peptides may be used to induce a helper T cell response, e.g. in cases of autoimmun prostate ដ for

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Best Local
Sequences Y73087-Y73102 represent hepatitis C virus (HCV)-derived MHC class II (HTL) epitopes which are claimed for use in the present invention. The invention relates to a novel expression vector comprising a promoter operably linked to a fusion gene encoding a major histocompatibility complex (MHC) targetting sequence, and two or more heterologous peptide epitopes. The MHC targetting sequence may be a class I targetting sequence, which directs an MHC class I epitope to a cytosolic pathway or to the endoplasmic reticulum, or an MHC class II targetting sequence, which directs extracellular antigen peptides for presentation on MHC class II molecules. The heterologous epitopes may comprise either helper T lymphocyte (HTL) epitopes,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    promoter; major histocompatibility complex; MHC; targetting; peptide; epitope; antigen; presentation; class I; cytosolic pathway; endoplasmic reticulum; class II; extracellular antigen; endocytic pathway; helper T lymphocyte; HTL; universal epitope; cytotoxic T lymphocyte; CTL; immune response; immunogenicity; assay; vaccine; immunity; infection; pathogen; virus; HHY; HBY; HCY; hepatilis B, hepatitis C, bacterium; protozoan; tumour cell; autoimmune disease; activation; antiviral; antimalarial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       disease, allograft post-streptococcal hypersensitivity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                         Claim 11; Page 67; 130pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic.
Hepatitis c virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Chimeric; pan DR epitope; expression vector;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28-FEB-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Y73095 standard; Peptide; 15
                                                                                                                                                                                                                    Expression vectors encoding major histocompatibility targeting sequence, used as, e.g. tumor vaccines -
                                                                                                                                                                                                                                                                 WPI; 2000-039103/03
                                                                                                                                                                                                                                                                                              Chesnut RW;
                                                                                                                                                                                                                                                                                                          Fikes JD,
                                                                                                                                                                                                                                                                                                                                                                   13-MAY-1998;
15-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                        18-NOV-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hepatitis C virus (HCV)-derived MHC class II (HTL) epitope,
                                                                                                                                                                                                                                                                                                                                      (EPIM-) EPIMMUNE INC
                                                                                                                                                                                                                                                                                                                                                                                                             13-MAY-1999;
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rliafasrgnhvs 15
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8; Conserv
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98US-0085751
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        rejection, allergy, Lyme disease, her endocarditis, glomerulonephritis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
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Best Local
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The present peptide is an antigenic peptide (AP), derived from the C-terminal region of the hepatitis C virus (HCV) non-structural protein 4 (NS4). The AP was prepd. using FMOC chemistry, and can be used in a claimed method for the differential diagnosis of HCV. One, two or three of the peptides W01980-82 are separately contacted with an antibody (Ab) conty. sample, and the binding between the peptide(s) and the Ab determined. The Ab conty. sample is then contacted with the peptide W01983, and the binding between the peptide and the Ab determined. The strength of the binding between the peptide(s) and the Ab in the two assays is compared, where stronger binding in the 1st assay is indicative of acute HCV infection, and equivalent binding is indicative of chronic HCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       or a cytotoxic T lymphocyte (CTL) epitope and a universal HTL epitope such as a pan DR epitope (PADRE). The vectors are useful for stimulating an immune response in vivo, as well as for use in assaying the human immunogenicity of a human T cell peptide epitope in vivo in a non-human mammal. They provide a nucleic acid vaccine for enhancing immunity against infectious pathogens, such as viruses (e.g., HIV, hepatitis B (HBV and hepatitis C (HCV)) bacteria, protozoa (e.g., plasmodium falciparum, the cause of malaria) and also tumour cells and autoimmune diseases. Universal MHC class II epitopes are advantageously combined with other MHC class I and class II epitopes to increase the number of cells that are activated in response to a given antigen and provide a broader population coverage of MHC-reactive alleles.
                                                                                                                                                                                                                                                                                                                                                                 (USSH)
                                                                                                                                                                                                                   Claim 3; Page 27; 50pp; English.
                                                                                                                                                                                                                                                 Antigenic peptide(s) binding anti-hepatitis C virus antibodies useful for differential diagnosis of HCV in subjects
                                                                                                                                                                                                                                                                                                                                Fields HA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15-FEB-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hepatitis C virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Antigenic peptide; C-terminal region; hepatitis C virus; non-A non-B; non-structural protein 4; NS4; differential
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-SEP-1996
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Antigenic peptide comprising
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                                                                                                                                                                                                                                                                                                                                                                  SD
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                                                                                                                                                                                                                                                                                                                                                                 DEPT HEALTH & HUMAN SERVICES.
SEC DEPT HEALTH
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HCV NS4 protein residues 1916-1935.
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diagnosis;
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Best Local Similarity
Matches 8; Conserv
                                          Sequences Y73087-Y73102 represent hepatitis C virus (HCV)-derived MHC class II (HTL) epitopes which are claimed for use in the present invention. The invention relates to a novel expression vector comprising a promoter operably linked to a fusion gene encoding a major histocompatibility complex (MHC) targetting sequence, and two or more heterologous peptide epitopes. The MHC targetting sequence may be a class I targetting sequence, which directs an MHC class I epitope to a cytosolic pathway or to the endoplasmic reticulum, or an MHC class II targetting sequence, which directs extracellular antigens to enter the endocytic pathway to be processed into antigen peptides for presentation on MHC class II molecules. The heterologous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chimeric; pan DR epitope; expression vector; parting; peptide; promoter; major histocompatibility complex; MHC; targetting; peptide; epitope; antigen; presentation; class I; cytosolic pathway; endoplasmic reticulum; class II; extracellular antigen; endopytic reticulum; class II; extracellular antigen; endocytic pathway; helper T lymphocyte; HTL; universal epitope; cytotoxic T lymphocyte; CTL; immune typonse; immunogenicity; assay; vaccine; immunity; infection; pathogen; virus; HTV; HBV; HCV; hepatitis B; hepatitis C; bacterium; protozoan; tumour cell;
                epitopes may comprise either helper T lymphocyte (HTL) epitopes, or a cytotoxic T lymphocyte (CTL) entires.
                                                                                                                                                                                                                                   Claim 11;
                                                                                                                                                                                                                                                                                                            WPI; 2000-039103/03
                                                                                                                                                                                                                                                                                                                                                                                                                    13-MAY-1998;
15-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Y73093
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                                                                                                                                                                                                                                                                             Expression vectors encoding major histocompatibility targeting
                                                                                                                                                                                                                                                                                                                                                        Fikes JD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13-MAY-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hepatitis C virus (HCV)-derived MHC class II (HTL) epitope,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28-FEB-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hepatitis c virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     autoimmune disease; activation; antiviral; antimalarial;
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                                                                                                                                                                                                                                 Page 67; 130pp; English.
                                                                                                                                                                                                                                                                used as,
                                                                                                                                                                                                                                                                                                                                                        Hermanson GG,
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98US-0085751
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lymphocyte (CTL) epitope
a pan DR epitope (PADRE).
                                                                                                                                                                                                                                                               e.g. tumor
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                                                                                                                                                                                                                                                                vaccines
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    vectors
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 are useful
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7 RLIAFTSEHSHFS 19

Query Match Best Local S Matches 8

Similarity 61.9 8; Conservative

29.6%;

Score 37; DB 14; Pred. No. 7.4; l; Mismatches 4

Length 24;

Indels

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Matches 8
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                                                                                                                           The synthetic peptide corresponds to residues 1917-1940 of the NS4 domain of HCV. The peptide may be used for the sensitive and specific detection of HCV infection Antibodies raised against the peptide can be used for passive immuno-prophylaxis and the HCV antispens can be used in vaccines to prevent HCV infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Detection of hepatitis C virus antigens - using antibody bound to solid support and competitive % \left( 1\right) =\left( 1\right) +\left( 1\right) +\left(
Sequence
                                                                                              See
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antibody bound to solid support and
antigen-reporter complex
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Burk KH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16-SEP-1991;
12-FEB-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-APR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   R34043;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 27; Page 122; 190pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1993-117737/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16-SEP-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO9306488-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hepatitis C virus; non structural region; antigen; diagnosis; vaccine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HCV NS peptide DP3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (GENE-) GENELABS TECHNOLOGIES INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10 rliafasrgnhvs
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                                                                                              also
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Dreesman GR,
    24 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           91US-0762135.
92US-0835717.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     92WO-US07865
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pauletti D;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
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Y41898

Y41898 standard; Peptide; 19 AA.

13

09-DEC-1999

(first entry)

Human; rheumatoid arthritis; RA; diagnosis; RPI; RADF; detecti rheumatoid arthritis diagnostic feature; ERPI; synovial fluid; rheumatoid arthritis diagnostic protein isoform; screening; expression reference protein isoform; prognosis.

detection;

W09947925-A2 Homo sapiens

23-SEP-1999

Rheumatoid arthritis diagnostic protein isoform peptide #49

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                                                                                                                                                          CC two-dimensional array of features. The method can be used for screening, condingnosis and prognosis of RA in a subject or for monitoring the effect of an anti-RA drug or therapy administered to a subject. The method comprises: (a) analysing a sample of serum or plasma and optionally comprises: (a) analysing a sample of serum or plasma and optionally comprises: (a) analysing a sample of serum or plasma and optionally confidentiation of features; (b) identifying at least one chosen confident whose relative abundance correlates with the presence or absence of RA; and (c) comparing the abundance of each chosen feature in the sample with the abundance of that chosen feature in serum or plasma from cone or more persons without RA, where the relative abundance of the chosen feature of the subject. The method can also be used in clinical studies for testing drugs for therapy of RA, for purification of RA-compositic protein isoforms (RPIS), and for production of antibodies to diagnostic protein isoforms (RPIS), and for production of antibodies to compounds that promote or inhibit their activity, which are then used as CC RA drugs. Nucleic acid encoding RADFs can be used in gene therapy contocols, Y41844 to Y42100 represent RPI peptides, Y42101 to Y42103 corposent expression reference protein isoform peptides and 225066 to contocols, Y42100 represent protein isoform peptides and 225066 to contocols.
                                              Query Match
Best Local Similarity
Matches 7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 18; 157pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Diagnosis of human rheumatoid arthritis by two-dimensional
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1999-571871/48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   electrophoresis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Parekh RB, Patel TP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (OXFO-) OXFORD GLYCOSCIENCES UK LTD.
                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A method has been developed for the diagnosis of human rheumatoid
8 LIAFTSEHSHFSLKKG
                                                                                                                                   19
                                                 Conservative
                                                                                                                                   Α,
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                                                                 28.0%;
43.8%;
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                                                Score 35; DB Pred. No. 12; 4; Mismatches
                                                                                 20;
                                                 'n
                                                                                 Length 19;
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RESULT Y73094

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RESULT
W85304
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                                              Query Match
Best Local
                                   Matches
                                                                                                                                                                w85284-451 represent helper T-cell class II peptides, which can bind to the human leucocyte antigens (HIA) DR4w4, DR1 and DR7. The peptides are used in the course of the invention. The specification describes peptides that that induce a cytotoxic T lymphocyte (CTL) response, and T-helper peptides, that are used together to generate a CTL response for the treatment or prevention of viral, fungal, bacterial or parasitic infections (e.g. hepatitis, acquired immune deficiency syndrome or malaria) or cancer (e.g. renal or cervical carcinoma, lymphoma, prostate cancer or condyloma acuminatum). Helper T-cell peptides may be used alone to induce a helper T cell response, e.g. in cases of autoimmune disease, allograft rejection, allergy, Lyme disease, hepatitis,
                                                                                                                                                                                                                                                                                                                                                                                         Composition containing peptide that induces cytotoxic T lymphocyte response, and helper peptide - can bind to human leucocyte antigen alleles, used to treat or prevent cancers, parasitic infections and autoimmune disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Helper T-cell peptide; human leucocyte antigen; HLA; DR4 DR7; cytotoxic T lymphocyte; CTL; hepatitis; autoimmune acquired immune deficiency syndrome; malaria; cancer; allograft rejection; allergy; Lyme disease; hepatitis; post-streptococcal endocarditis; glomerulonephritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-FEB-1997;
23-JAN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16-FEB-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   W85304 standard; peptide; 21 AA
                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 40; 51pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1998-427679/36.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-JUL-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
Hepatitis C virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Helper T-cell class II peptide derived from
                                                                                                                                         hypersensitivity..
                                                                                                                                                      post-streptococcal endocarditis, glomerulonephritis and food
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (EPIM-) EPIMMUNE INC
                             Local Similarity tes 7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14
   7 RLIAFTSEHSH 17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   hypersensitivity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sidney J,
                                                                                                              21 AA;
                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97US-0037432.
97US-0036713.
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                                                27.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Southwood
                                              Score 34; DB 19;
Pred. No. 21;
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                                                               Length 21;
                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             disease;
                                   0,
                                   Gaps
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Y73094 standard; Peptide;

21

A

Matches

7;

Conservative

1:

Mismatches

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Indels

0;

Gaps

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CC histocompatibility complex (MHC) targetting sequence, and two or more characteristic periodes. The MHC targetting sequence may be a class I targetting sequence, which directs an MHC class I epitope to ca cytosolic pathway or to the endoplasmic reticulum, or an MHC class I targetting sequence, which directs extracellular antigens to care the endocytic pathway to be processed into antigen peptides complete the endocytic pathway to be processed into antigen peptides complete may comprise either helper I lymphocyte (HTL) epitopes, complete may comprise either helper I lymphocyte (HTL) epitopes, complete as a pan DR epitope (ETL) epitope and a universal HTL complete set as epitope endopes are actionated as a pan DR epitope (ETL) epitope and a universal HTL complete set as epitope (PADRE). The vectors are useful complete set in management of a non-human mammal. They provide a nucleic acid vaccine for complete in a non-human mammal. They provide a nucleic acid vaccine for complete in a non-human mammal. They provide a nucleic acid vaccine for complete the set of malaria) and also tumour cells and complete the set of malarial and also tumour cells and complete of cause of malarial and also tumour cells and complete of complete of collections are advantageously complete the target are advantageously complete of collections are advantageously complete of collections are advantageously complete the target are advantageously complete of collections are advantageously comp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chimeric; pan DR epitope; expression vector;
promoter; major histocompatibility complex; MHC; targetting; peptide;
epitope; antigen; presentation; class I; cytosolic pathway;
endoplasmic reticulum; class II; extracellular antigen;
endocytic pathway; helper T lymphocyte; HTL; universal epitope;
cytotoxic T lymphocyte; CTL; immune response; immunogenicity; assay;
vaccine; immunity; infection; pathogen; virus; HTV; HBV; HCV;
hepatitis B; hepatitis C; bacterium; protozoan; tumour cell;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequences Y73087-Y73102 represent hepatitis C virus (HCV)-derived MHC class II (HTL) epitopes which are claimed for use in the present invention. The invention relates to a novel expression vector comprising a promoter operably linked to a fusion gene encoding a major
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hepatitis B; hepatitis C; bacterium; protozoan; tumour c autoimmune disease; activation; antiviral; antimalarial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Expression vectors encoding major histocompatibility targeting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13-MAY-1998;
15-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13-MAY-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hepatitis C virus (HCV)-derived MHC class II
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Y73094;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2000-039103/03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Fikes JD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18-NOV-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hepatitis c virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28-FEB-2000
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                                                                             of.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     used
                                                  cells that are activated in response to a given antigen broader population coverage of MHC-reactive alleles.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hermanson
21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
ΑĄ,
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98US-0085751.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  as, e.g. tumor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99WO-US10646
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        vaccines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ₽,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ishioka GY,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (HTL) epitope, #252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Livingston B;
                                                                          and
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Query Match Best Local Similarity

27.2%;

Score Pred.

34; No.

띪 21;

Length

21;

Sequence

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RESULT RE
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Peptide compsns. comprise at least one and pref. a combination two, three, four or more biotinylated peptides chosen from the sequences given in R41058-R41166. The peptides represent immunologically important regions of viral proteins and are prepd. by solid phase peptide synthesis. The compsns. are useful for the detection of antibodies to HCV, and/or HIV,
                                                                                                                                                                                                                                                 New biotinylated peptide(s) corresp. to immuno commentatione(s) - with increased antigenicity, useful in antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        06-MAR-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                08-MAR-1993;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HCV peptide
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                                                                                                                                                                                                              Claim 4;
                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1993-303397/38.
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10 rliafasrgnh
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                                                                                                                                                                                                           Page 90-98; 133pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "the N-terminal comprises (A)-(B)-(X)-Y; where
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "the C-terminal comprises Y-(X)-Z"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         residues of (same or different) glycine, beta-alanine, 4-aminobutyric acid, 5-aminovaleric acid or 6-aminobeanoic acid; parenthesis around B and X indicate opt. presence at the specified positions but B or X must be present in at least one of the positions shown,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         present in at least one of the positions shown B interacts with the peptide to give a cpd. with greater diagnostic sensitivity; A (optional) one or more amino acids, NH2 or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2-
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bond or linking gp(s). which
minimises steric hindrance,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gp. which modifies the N-terminus;
one or more amino acids, OH, NH2, or a
linkage involving either of these 2 gps."
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RESULT 17
P60744
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Best Local Similarity
Matches 7; Conserv
                                                                                                                            The inventors claim a polypepide having a mol. wt. of about 35kd-42kd and having at least one of the SQ in P60743-P60746. In P60743-P60746, X in the SQ corresp. to an AA such that the SQ is substantially the same as a polypeptide expressed by an HTLV, esp. HTLV-I or HTLV-II (see P60747-P60749). Also claimed is a polypeptide having a mol. wt. of not greater than about 42kd and having an AA SQ of at least 12 AAs found within at least one of the polypeptide SQ in P60743-P60746. Polypeptides encoded for in the region described as pX-IV in the XSQ of HTLV-II are characterized by being respectively about 40kd and 37kd. Detection of antibodies to these proteins in serum may be used to determine whether exposure to an HTLV-IV in the SQ COUNTER ABSOCCULTER.
                                                                                                                                                                                                                                                                                                                                 New retroviral polypeptide(s), fragments antisera and antibodies - useful for detection of retro:viruses in HTLV family, e.g. causing adult T-cell leukaemia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 2 encoded by the X-region of viruses in the HTLV family, \mathtt{HTLV-I} and \mathtt{HTLV-II}.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
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                                                                                                                                                                                                                                                                                                         Claim 1; Page 23; 33pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19-SEP-1985;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  W08601834-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human T-lymphotrophic viruses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   epitope; anti-X region protein antibody.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Adult T-cell leukaemia; X region; immunoassay; HTLV; retrovirus;
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                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1986-094087/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19-SEP-1984;
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(SLAM/) SLAMON D J.
                                                                                                                     virus has occurred
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| 11 rliafasrgnh 21
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 5 LPRLIAFTSEHSHFSLK 21
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                                        Score 33; DB Pred. No. 24;
                          Mismatches
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RESULT 18
R29626
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Y05598
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Best Local Similarity
Thes 6; Conserv
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                                                                                                                                                                                                                                The peptide corresponds to a glutamic acid decarboxylase (GAD 65) sequence and may be used for the detection of autoantibodies to GAD 65. They can also be used for screening drugs such as those that alter GAD function and for generation of antibodies which can be used to detect GAD 65. Such methods can be used in the diagnosis and therapy of autoimmune diseases such as insulin dependent diabetes mellitus and "stiff man" syndrome. The polypeptide can be used to bind or block the continuance of an autoimmune response to GAD 65. It may also be coupled to therapeutic agents and used immunotherapeutically. See also R29625-9.
19-JUL-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                     Glutamic acid decarboxylase isolated polypeptide(s) - useful for diagnosis and treatment of auto-immune diseases, e.g. insulin dependent diabetes mellitus, drug screening and antibody prodn.
                        Y05598;
                                              Y05598 standard;
                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                               Claim 5; Page 20; 35pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1992-425701/52.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Clare-Salzier MJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Glutamic acid decarboxylase; auto immune disease; insulin dependent; diabetes mellitus; drug screening; antibody; stiff man syndrome.
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                                              Peptide; 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                peptide;
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                                                                                                                                                               26.4%;
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Pred. No.
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Best Local
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WO9806263-A1
                                        Synthetic
                                                                                                                        ICH-3 p20 region
                                                                                                                                                   28-JUL-1998
                                                                                                                                                                              W56030;
                                                                                                                                                                                                     W56030 standard; peptide; 15
                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; Page 89; 162pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New isolated HIV-1 group O strains - used to produce polynucleotides, antigens and antibodies for use in diagnosis and vaccines for prevention of HIV-1 infection
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human immunodeficiency virus type 1.
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                                                                              ICH-3; mouse;
interleukin co
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rlicytsvh 12
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                                                                                                                                                                                                                                                                                                                             6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                 12 AA;
                                                                 e; programmed cell death; septic shock; folliculogenesis; converting enzyme; ICE; cysteine protease; cytokine; apoptosis; sepsis; burn; trauma; immunogen.
                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Outlier strain; V3 hypervariable region; gp160; in; antigen; vaccine; diagnosis; AIDS.
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                                                                                                                      immunogenic peptide.
                                                                                                                                                                                                                                                                                                                                           24.8%;
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                                                                                                                                                                                                                                                                                                                             1;
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present sequence represents an immunogenic peptide used to produce cantibodies which will bind to the p20 region of ICH-3 from the present convention. The present invention describes: (1) a method for modulating programmed cell death in a cell, comprising contacting the cell with computating amounts of ICH-3; (2) a method for promoting pro-interleukin (pro-IL) 1-beta processing by a cell in the presence of IL-converting cenzyme (ICE), comprising contacting the cell with ICH-3 expressed under the control of a CMV promoter; (3) a method for stimulating synthesis of Ich-3 gene products in a cell, comprising contacting the cell with CC stimulatory amounts of Ilpopolysaccharide (LPS); (4) a monoclonal or polyclonal antibody that specifically binds to ICH-3; (5) a transgenic con-human animal, comprising a disrupted Ich-3 gene, and its progeny, and (6) a method of protecting against lung injury in common medical conditions, comprising utilising inhibitors of the pathway of apoptosis. The transgenic animal is used as model for the study of septic shock or infection. It is also used for screening for folliculogenic compounds or usceptibility to infection. Inhibitors of ICH-3 are used to reduce
                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 50.0
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Transgenic knock-out mice containing new Ich-3 disrupted gene useful in, e.g. screening for compounds to treat septic shock defects in folliculogenesis
                            20-JAN-1988
                                                                                     synthetic
                                                                                                                oncogene related peptide; HTLV-PX-related
                                                                                                                                               HTLV-PX-related
                                                                                                                                                                             08-OCT-1990
                                                                                                                                                                                                          P81134;
                                                                                                                                                                                                                                     P81134 standard; protein; 17 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1998-159183/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Fishman JA, Miura M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (MIUR/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           09-AUG-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       08-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19-FEB-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (YUAN/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (FISH/)
                                                                                                                                                                                                                                                                                                                                            13 SEHSHFSLKKGA 24
                                                                                                                                                                                                                                                                                                              1 tefkhlslryga 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MIURA M.
) WANG S.
) YUAN J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FISHMAN J A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               of sepsis, burns and trauma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  15 AA;
                                                                                                                                                                             (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        97WO-US13898
                                                                                                                                             peptide "HTLV-PX-II".
                                                                                                                                                                                                                                                                                                                                                                                      24.8%;
50.0%;
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                                                                                                                                                                                                                                                                                                                                                                                       Score 31;
Pred. No.
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10-JUL-1987;

87EP-0109985

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RESULT
R49369
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Best Local S
Matches 6
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peptides
See also
The sequences given in R49291-505 and R46981-7038 represent peptide fragments of naturally-occuring immunomodulatory proteins. These fragments are between 10-30 residues in length and bind to a human major histocompatibility complex (MMC) class II allotype. These peptides may be used for therapy of autoimmune diseases, such as
                                                                                                                                                                                                                                                                                                                               Naturally-occuring; immunomodulatory protein; human; therapy; class I; major histocompatibility complex; class II; allotype; type I diabetes; autoimmune disease; rheumatoid arthritis; T-cell-mediated response; mutiple sclerosis; transplant rejection; vaccine; MHC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 22; Page 33; 53pp; English
                                                                 Disclosure; Page 42; 139pp; English.
                                                                                                                                                                                                             11-AUG-1992;
15-JUN-1993;
                                                                                                                                                                                                                                                                                                                                                                                        HLA-DR beta-chain position 1-7(sic).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New oncogene related peptide - useful in prepn of antigen and then reactivity with cancer proteins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1988-015700/03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11-JUL-1986;
                                                                                                  Novel immunomodulatory peptide(s) treatment of auto:immune diseases,
                                                                                                                                   WPI; 1994-082825/10
                                                                                                                                                         Vignali
                                                                                                                                                                      Chicz
                                                                                                                                                                                                                                               11-AUG-1993;
                                                                                                                                                                                                                                                                   03-MAR-1994.
                                                                                                                                                                                                                                                                                         WO9404171-A
                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                              16-SEP-1994 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                          R49369 standard;
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                                                                                                                                                                                         (HARD ) HARVARD COLLEGE.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5 LPRLIAFTSEHSHFSLK
                                                                                                                                                   RM,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 by solid phase or soln. methods. One of 2 HTLV-PX-related des among 23 claimed oncogene-related peptides. 1so P81114-33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity 6; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
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93US-0925460.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          Protein;
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Pred. No. 54;
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                                                                                                  and nucleic, transplant
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                                                                                                  acids - useful for rejection and for
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Query Match
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Matches 7
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Best Local S
Matches 4
                                                                                         This sequence is a fragment of the AV37 antigen protein of the invention. The protein is recognised by a monoclonal antibody (MAb) secreted by the hybridoma AV37 deposited at the European Collection of Cell Cultures (ECACC) accession number 98030304. The polypeptide can be used to isolate a MAb, produce a hybridoma producing the MAb, and in a composition for use as a vaccine. The vaccine can be used against oncogenic avian viruses, including Marek's disease virus, avian leucosis virus, Rous-associated virus and reticuloendotheliosis virus. The vector can be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                type I diabetes, rheumatoid arthritis and mutiple sclerosis, reduce transplant rejection. They may also be used for vacciproviding an exclusively T-cell-mediated response, which can class I or class-II based, or both, depending on the length a character of the immunogenic peptides.
                                                                                   used
                                                                                                                                                                                                                           New polypeptide, antibodies -
                                                          Sequence
                                                                                                                                                                                                    Claim 6; Page
                                                                                                                                                                                                                                                                WPI; 2000-013437/01
                                                                                                                                                                                                                                                                                     Burgess SC,
                                                                                                                                                                                                                                                                                                                                    29-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                    04-NOV-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                 Gallus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rous-associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     oncogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AV37 antigen
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Y54605 standard;
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                                                                                                                                                                                                                                                                                                             (ANIM-)
                                                                                                                                                                                                                                                                                                                                                            22-APR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AV37 antigen;
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                                                                                 to treat avian tumours.
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4; Conserv
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                                                   22 AA;
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                                                                                                                                                                                                                                                                                     Davison
                                                                                                                                                                                                                                                                                                              ANIMAL HEALTH LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein sequence fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                      36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       monoclonal antibody; hybridoma AV37; vaccine; avian tumour; an vírus; Marek's dísease vírus; avian leucosis vírus; ed vírus; reticuloendotheliosis vírus; therapy.
                                                                                                                                                                                                                                                                                                                                      98GB-0009070.
                                                                                                                                                                                                                                                                                                                                                            99WO-GB01238
                                                                                                                                                                                                                                        useful as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Peptide;
                                                                                                                                                                                                    63pp; English.
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            24.8%;
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                                                                                                                                                                                                                                                                                     Ross LJN;
                                                                                                                                                                                                                                       a vaccine
Score 31; DB Pred. No. 73; 1; Mismatches
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Matches 5
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                     Beta-chain; human; chorionic gonadotrophin; beta-hCG; inhibition; human immunodeficiency virus; HIV; infection; replication; Kaposi's sarcoma; haematopolesis.
Homo sapiens
                                                                   Human chorionic gonadotrophin beta-chain fragment.
                                                                                           26-JUN-1998
                                                                                                                 W50063;
                                                                                                                                      W50063 standard; peptide; 23 AA.
                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                          therapy.
                                                                                                                                                                                                                                                                                                                                                                                                       Example; Page 78; 126pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                            Treating or preventing wasting syndrome - by administration of human chorionic gonadotropin, beta-hCG, peptides or derivatives of these
                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1998-077106/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bryant J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  09-SEP-1996;
24-JUN-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Beta-chain; human; chorionic gonadotrophin; beta-hCG; treatment; prevention; wasting syndrome; viral infection; cancer; chinic cardiovascular disease; chemotherapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human chorionic gonadotrophin beta-chain fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            26-JUN-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (UYMA-) UNIV MARYLAND BIOTECHNOLOGY INST.
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                                                                                                                                                                                                                     2 MAALPRLIAFTSEHSHF 18
                                                                                                                                                                                             lpalpqvvcltcddprf 19
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5; Conserv
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                                                                                         (first entry)
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                                                                                                                                                                                                                                                                                                    A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  96US-0709933.
96US-0669675.
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                    haematopoiesis.
                                                                                                                                                                                                                                                       24.8%;
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Pred. No.
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77;
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                                               Query Match
Best Local Similarity
Matches 5; Conserv
                                                                                                                                  The present sequence is a peptide derivative of the beta-chain of human chorionic gonadotrophin (beta-NCG). The peptide is active in inhibiting, e.g. HIV infection or replication or Kaposi's sarcoma, or has pro-haematopoietic activity.
                                                                                                            Sequence
                                                                                                                                                                                                                      Human chorionic gonadotrophin peptide derivatives - are active in inhibiting, e.g. HIV infection or replication, Kaposi's Sarcoma or have pro-haematopoietic activity
                                                                                                                                                                                                Example; Page 110; 174pp; English.
                                                                                                                                                                                                                                                                         WPI; 1998-076887/07.
                                                                                                                                                                                                                                                                                                  Bryant J, Gallo RC,
                                                                                                                                                                                                                                                                                                                                                  09-SEP-1996;
24-JUN-1996;
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                        2 MAALPRLIAFTSEHSHF 18
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lpalpgvvcltcddprf 19
                                                                                                             23 AA;
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96US-0669681.
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                                                             24.8%;
                                                                                                                                                                                                                                                                                                   Lunardi-Iskandar Y;
                                                 Score 31; DB Pred. No. 77; 5; Mismatches
                                                                         19; Length 23;
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Maximum Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Scoring table:
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ALIGNMENTS

hypothetical protein HP1528 - Helicobacter pylori (strain 26695) C;Species: Helicobacter pylori

C;Date: 09-Aug-1997 #sequence_revision 09-Aug-1997 #text_change 08-Oct-1999
C;Accession: H64710
R;Tomb, J.F.; White, O.; Kerlavage, A.R.; Clayton, R.A.; Sutton, G.G.; Fleischmann, R Peterson, S.; Loftus, B.; Richardson, D.; Dodson, R.; Khalak, H.G.; Glodek, A.; McKe son, J.D.; Kelley, J.M.; Cotton, M.D.; Weidman, J.M.; Fujii, C.; Bowman, C.; Watther 388, 539-547, 1997
A;Authors: Wallin, E.; Hayes, W.S.; Borodovsky, M.; Karpk, P.D.; Smith, H.O.; Fraser, A;Title: The complete genome sequence of the gastric pathogen Helicobacter pylori. A;Reference number: A64520; MUID:97394467
A;Accession: H64710
A;Status: preliminary; nucleic acid sequence not shown; translation not shown A;Molecule type: DNA
A;Residues: 1-25 <TOM>

A;Cross-references: GB:AE000651; GB:AE000511; NID:g2314708; PIDN:AAD08577.1; PID:g231

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acidic fibroblast growth factor - pig (fragment)

NyAlternate names: alpha-endothelial cell growth factor

C;Species: Sus scrofa domestica (domestic pig)

C;Date: 28-Feb-1990 #sequence_revision 28-Feb-1990 #text_change 18-Jun-1993

C;Accession: S03954

R;Quinkler, W.; Maasberg, M.; Bernotat-Danielowski, S.; Luethe, N.; Sharma, H.S.; Sch

Eur. J. Biochem. 181, 67-73, 1989

A;Title: Isolation of heparin-binding growth factors from bovine, porcine and canine
A;Reference number: S03953; MUID:89231704

A;Accession: S03954
                ğ
                                                                                                                                        A; Molecule type: protein A; Residues: 1-20 <QUID'S, C; Keywords: growth factor
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S03954
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Pred. No. 2.7e+02;
3; Mismatches 6;
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S48862

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R:Tsugita, A.
submitted to JIPID, April
A:Reference number: PS0206
A:Accession: PS0249
A:Molecule type: protein
A:Residues: 1-14 <TSU>
                                                                                                                                           RESULT 5
B39138
dihydrolipoamide S-acetyltransferase (EC 2.3.1.12) - Pelobacter carbinolicus
C;Species: Pelobacter carbinolicus
C;Date: 27-Nov-1991 #sequence_revision 27-Nov-1991 #text_change 05-May-2000
C;Accession: B39138
R;Oppermann, F.B.; Schmidt, B.; Steinbuechel, A.
J. Bacteriol. 173, 757-767, 1991
A;Title: Purification and characterization of acetoin:2,6-dichlorophenolindop acetoin dehydrogenase enzyme system.
A;Reference number: A39138; MUID:91100366
A;Accession: B39138
                                                      A;Molecule type: protein
A;Residues: 1-22 <OPP>
C;Superfamily: dihydrolipoamide acetyltransferase; lipoyl/biotin-binding homology
C;Keywords: acyltransferase; coenzyme A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          triacylglycerol lipase (EC 3.1.1.3) I A chain - Rhizopus niveus (strain IFO 4759) (fragm c;Species: Rhizopus niveus C;Date: 03-May-1994 #sequence_revision 07-Oct-1994 #text_change 07-May-1999 C;Accession: PC2171 R;Kohno, M.; Kugimiya, W.; Hashimoto, Y.; Morita, Y. Blosci. Biotechnol. Biochem. 58, 1007-1012, 1994 A;Title: Purification, characterization, and crystallization of two types of lipase from A;Reference number: PC2171; MUID:94319059 A;Accession: PC2171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C:Species: Oryza sativa (rice)
C:Date: 03-Feb-1994 #sequence_revision 03-Feb-1994 #text_change 11-Apr-1995
C:Accession: PS0249
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A;Residues: 1-10 <KOH>
C;Comment: This enzyme catalyzes the hydrolysis
C;Keywords: carboxylic ester hydrolase
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A; Experimental
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Query Match

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Score

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Biochem. J. 123, 259, 1971

A;Pitle: Identification in urine of a low-molecular-weight polar glycopeptide contain A;Pitle: Identification in urine of a low-molecular-weight polar glycopeptide contain A;Reference number: A03188; MUID:72062338

A;Reference number: A03188

A;Recession: A03188

A;Recession: A03188

A;Recession: A03188

A;Recession: A03188

C;Comment: The identity of the glycoprotein from which this peptide is derived is unk re has also been found (see PIR:XGHUE).
C;Comment: The identity of the glycoprotein from which this peptide is derived is unk re has also been found (see PIR:XGHUE).
C;Keywords: glycoprotein
C;Keywords: glycoprotein
C;Keywords: glycoprotein
F;1/Binding site: carbohydrate (Cys) (covalent) #status experimental
R;Gotoh,
Biochem.
                                 hemoglobin chain III - earthworm (Lumbricus terrestris) (fragment) c;Species: Lumbricus terrestris (common earthworm) c;Date: 19-Nov-1988 #sequence_revision 19-Nov-1988 #text_change 04 C;Accession: A28563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R;Boocock, C.A.; Charnock-Jones, D.S.; Sharkey, A.M.; McLaren, J.; Barker, F. J. Natl. Cancer Inst. 87, 506-516.

A;Title: Expression of vascular endothelial growth factor and its receptors A;Reference number: 156493; MUID:95222657

A;Accession: 173619
                                                                                                                 RESULT
A28563
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C; Genetics:
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C;Species: Homo sapiens (man)
C;Date: 02-Aug-1996 #sequence_revision 02-Aug-1996 #text_change 21-Jul-2000
C;Accession: I73619
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C;Date: 20-Jun-2000 #sequence_revision 20-Jun-2000 #text_change
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A; Residues: 1-24 < RES>
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T.; Shishikura, F.; Snow, J.W.; Ereifej, K.I.; J. 241, 441-445, 1987
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J. 123, 25P, 1971
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A;Title: Two.globin strains in the gian
A;Reference number: A90337; MUID:87241;
A;Accession: A28563
A;Molecule type: protein
A;Residues: 1-22 <GOT>
C;Superfamily: globin; globin homology
C;Keywords: oxygen carrier
                    RESULT
S07232
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A;Title: Frameshift mutations at two hotspots in vasopressin transcripts in post A;Reference number: I59310; MUID:94286576
A;Accession: I80178
                                                                                                                                                                                                                                                                   A;Status: preliminary; translated
A;Molecule type: mRNA
A;Residues; 1-25 <RES>
                                                                                                                                                                                                                                                                                                                                      R;Evans, D.A.; van der Kleij, A.A.; Sonnemans, M.A.; Burbach, J.P.; van Leeuwen, Proc. Natl. Acad. Scir U.S.A. 91, 6059-6063, 1994
A;Title: Frameshift mutations at two hotspots in vasopressin transcripts in post-A;Reference number: 159310; MUID:94286576
                                                                                                                                                                                                                                                                                                                                                                                                             C;Species: Rattus sp. (rat)
C;Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 05-Nov-1999
C;Accession: I80179
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A; Residues: 1-25 < RES>
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C;Species: Rattus sp. (rat)
C;Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 05-Nov-1999
C;Accession: I80178
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ribulose-bisphosphate
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3; Mismatches 3
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Pred. No. 1.5e+03;
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C;Accession: A53875

R;White, K.C.; Babbitt, P.C.; Buechter, D.D.; Kenyon, G.L.

J. Protein Chem. 11, 489-494, 1992

A;Title: The principal islet of the Coho salmon (Oncorhyncus kis A; Reference number: A53875; MUID:93080727

A;Accession: A53875

A;Status: preliminary; not compared with conceptual translation A;Molecule type: nucleic acid

A;Residues: 1-20 <WHID
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A;Residues: 1-15 <SIY>
C;Superfamily: glucuronosyltransferase
C;Superfamily: glucuronosyltransferase; hexosyltransferase
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A;Residues: 1-20 <MUS>
C;Comment: This protein binds the newly synthesized large subunit
C;Comment: This protein has ATPase activity.
C;Superfamily: chaperonin groEL
C;Keywords: chloroplast; heterododecamer; molecular chaperone
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Eur. J. Blochem. 163, 529-534, 1987.
A;Title: Dissociation of the ribulosebisphosphate-carboxylase large-subunit binding A;Reference number: S07232; MUID:87161853
                   A; Experimental source: Brockmann body, principal islet A; Note: sequence extracted from NCBI backbone (NCBIP:1 C; Superfamily: creatine kinase; creatine kinase repeat
                                                                                                                                                                                                                                                                                                                     creatine kinase (EC 2.7.3.2) CK-MM - coho salmon (fragment) C; Species: Oncornynchus kisutch (coho salmon)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mol. Pharmacol. 40, 80-84, 1991
A;Title: Purification and properties of a
A;Reference number: A61266; MUID:91312327
A;Accession: A61266
                                                                                                                                                                                                                                                                                               C; Date: 26-Sep-1994 #sequence_revision 18-Nov-1994 #text_change 11-Apr-1997
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R; Styczynski, P.; G
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phosphotransferase
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ceil surface alloantigen gp60 - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 14-May-1993 #sequence_revision 14-May-1993 #text_change
C;Accession: A60770
R;Schadendorf, D.; Yamaguchi, H.; Old, L.J.; Srivastava, P.K.
J. Immunol. 142, 1621-1625, 1989
A;Title: A novel heteromorphic human cell surface alloantigen, g
A;Reference number: A60770; MUID:89140352
A;Accession: A60770
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$40638
ATF-43 protein - human (fragments)
C;Species: Homo sapiens (man)
C;Species: Homo sapiens (man)
C;Apate: 19-May-1994 #sequence_revision 10-Nov-1995 #text_change 10-Nov-1995
C;Accession: $40638
R;Hurst, H.C.; Totty, N.F.; Jones, N.C.
Nucleic Acids Res. 19, 4601-4609, 1991
A;Title: Identification and functional characterisation of the cellular act.
A;Reference number: $40638; MUID:91367654
A;Accession: $40638; MUID:91367654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    vasoactive intestinal peptide - Atlantic cod (fragment)
C;Species: Gadus morhua (Atlantic cod)
C;Date: 07-Sep-1990 #sequence_revision 07-Sep-1990 #text_change
C;Accession: JQ0361
 A; Molecule type:
A: Residues: 1-14
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                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Reference number: JQ0361
A; Accession: JQ0361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R;Thwaites, D.T.; Young, J.; Thorndyke, M.C.; Dimaline, R. Regul. Pept. 21, 436, 1988
A;Title: Isolation and characterisation of two teleost VIP's.
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les 5; Conservative
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35.7%;
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1.7e+03;
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2.2e+03
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RESULT
S66627
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tau protein - human (fragments)
c;Species: Homo sapiens (man)
C;Date: 15-Feb-1997 #sequence_r
C;Accession: S66627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                succinate dehydrogenase (ubiquinone) (EC 1.3.5.1) 27k iron-sulfur protein, mitochondr C;Species: Mus musculus (house mouse) C;Date: 21-Aug-1998 #sequence_revision 21-Aug-1998 #text_change 21-Aug-1998 C;Accession: PT0094 R;Kawakami, T.; Uchida, T.; Sakai, T.; Kamo, M.; Morimasa, T.; Tsugita, A. submitted to JIPID, July 1998 submitted to JIPID, July 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    superoxide dismutase (EC 1.15.1.1) (Mn) - rice (strain Nihonbare) (fragment)
C;Species: Oryza sativa (rice)
C;Date: 03-Feb-1994 #sequence_revision 03-Feb-1994 #text_change 05-Mar-1999
C;Accession: PS0455
                                                                                                                                                                                                                                                                                                                                A;Molecule type: protein
A;Residues: 1-15 <KAW>
A;Experimental source: brain, striatum
C;Keywords: mitochondrion; oxidoreductase
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A; Accession: PT0094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Description: catalyzes the dismutation of 2 molecules of peroxide radical to dioxyg C; Keywords: metalloprotein; oxidoreductase
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A; Residues: 1-15 <TSU>
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PS0455
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PS0206
                    #sequence_revision
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Pred. No. 1.8e+03;
1; Mismatches 3;
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Pred. No. 1.86
1; Mismatches
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pred. No. 1.7e+03;
2; Mismatches 4
                      13-Mar-1997
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1.8e+03;
2;
                      #text_change 13-Mar-1997
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complement C4 - guinea pig (fragment)
C:Species: Cavia porcellus (guinea pig)
C:Date: 31-Mar-1988 #sequence_revision 31-Mar-1988 #text_change 30-Sep-1993
C:Accession: A17267
R:Goldberger, G: Abraham, G.N.; Williams, J:; Colten, H.R.
J: Biol. Chem. 255, 7071-7074, 1980
A;Title: NH2-terminal sequence analysis of pro-C4, the precursor of the four A;Reference number: A17267; MUID:80227885
A;Accession: A17267
A;Molecule type: protein
A;Reference: A17267
A;Molecule type: protein
A;Reference: A17267
                                                                                                                                                                                                                                                                                                                                                   R:Chistoserdov, A.Y.; Boyd, J.; Mathews, F.S.; Lidstrom, M.E. Blochem. Blophys. Res. Commun. 184, 1181-1189, 1992
A;Title: The genetic organization of the mau gene cluster of A;Reference number: PH0856; MUID:92272706
A;Accession: PH0858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R;Moreno, F.J.; Medina, M.; Perez, M.; Montejo de Garcini, E.; Avila, J. FEBS Lett. 372, 65-68, 1995
A;Title: Glycogen Synthase kinase 3 phosphorylates recombinant human tau protein at seri A;Reference number: S66627; MUID:96032547
A;Accession: S66627
                                                                                                                                                                                                                                                                                                               A; Molecule type: DNA
A; Residues: 1-23 <CHI>
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C;Accession: PH0858
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C;Species: Paracoccus denitrificans
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RESULT
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1; Mismatches ]
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Pred. No. 2.2e+03;
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Pred. No. 2.9e+03;
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A36912
hypothetical protein 1 baiG-region [imported] - Eubacterium sp. (fragment)
C;Species: Eubacterium sp.
C;Date: 07-Apr-1994 *sequence_revision 18-Nov-1994 *text_change 20-Jun-2000
C;Date: 07-Apr-1994 *sequence_revision 18-Nov-1994 *text_change 20-Jun-2000
C;Accession: A36912
R;Franklund, C.V.; Baron, S.F.; Hylemon, P.B.
J. Bacteriol. 175, 3002-3012, 1993
A;Title: Characterization of the baiH gene encoding a bile acid-inducible NADH
A;Reterence number: A36912; MUID:93259945
A;Accession: A36912
A;Status: preliminary
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-24 <FRA>
A;Molecule type: DNA
A;Residues: 1-24 <FRA>
A;Experimental source: VPI 12708
A;Note: sequence extracted from NCBI backbone (NCBIN:131883, NCBIP:131906)
                             C;Accession: $74176

R;Izu, H.; Adachi, O.; Yamada, M.
FEBS Lett. 394, 14-16, 1996

A;Title: Purification and characterization
A;Reference number: $74176; MUID:97074194
A;Accession: $74176
A;Accession: $74176
A;Molecule type: protein
A;Residues: 1-10 </r>
A;Residues: 1-10 </r>
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A; Genetic code; SGC1
C; Reywords: fusion protein; mitochondrion
F; 1-4/Region: cytochrome-c oxidase chain I
F; 5-24/Region: cytochrome b (+2 frame shifted)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R;Poulton, J.; Deadman, M.E.; Gardiner, R.M.
Nucleic Acids Res. 17, 10223-10229, 1989
A;Title: Tandem direct duplications of mitochondrial DNA in
A;Reference number: S09363; MUID:90098864
A;Accession: S09363
A;Molecule type: DNA
A;Residues: 1-24 <POU>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               hypothetical MTCO1/MTCYB mutant fusion protein - human mitochondrion (fragment) C;Species: mitochondrion Homo sapiens (man) C;Date: 21-Nov-1993 #sequence_revision 14-Aug-1997 #text_change 20-Apr-2000 C;Accession: S09363
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A; Gene: MTCO1/MTCYB
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C; Comment: This is the hypothetical translation
A; Experimental source: strain K-12 C; Genetics:
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photosystem II 3.7K protein - spinach (fragment)
(;Species: Spinacia oleracea (spinach)
(;Date: 01-Dec-1989 #sequence_revision 01-Dec-1989 #text_change 18-Jun-1993
(;Accession: $01122
R;Schroeder, W.P.; Henrysson, T.; Akerlund, H.E.
FEBS Lett. 235, 289-292, 1988
A;Title: Characterization of low molecular mass proteins of photosystem II by N-terminal
A;Reference number: $01120
A;Accession: $01120
A;Accession: $01122
A;Molecule type: protein
A;Residues: 1-12 <SCH>
C;Keywords: chloroplast; photosynthesis; photosystem II; thylakoid
Search completed: February 5, 2001, 11:10:43 Job time: 1054 sec
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C;Keywords: dimer; phosphotransferase
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S01122
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Best Local Similarity 50.0%;
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ovis aries sus scrofa

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is derived by analysis of the total score distribution.
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GAEE_RANKU
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ALLL_CYDPO
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LPTE_BACST
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8 litoria cae
9 litoria gil
9 homo sapien
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6 carcinus ma
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Best Local Similarity 75.0
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                                SEQUENCE, AND MASS SPECTROMETRY OF 1.1; 1.1.1 , SPECTES-L. SPLENDIDA; TISSUE-PAROTOID GLAND; Stone D.J.M., Waugh R.J., Bowie J.H., Wallace "Peptides from Australian frogs. Structures of caeridin 1 from Litoria splendida."; J. Chem. Soc. Perkin Trans. 1:3173-3178(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEBS Lett. 411:173-178(1997).

11- FUNCTION: STRONG ANTINICROBIAL ACTIVITY AGAINST SEVERAL GRAM-POSITIVE AND GRAM-NEGATIVE BACTERIA AND FUNGI.

11- MASS SPECTROMETRY: MM-2502; METHOD-MALDI.

Antibiotic; Fungicide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Park C.B., Lee H.J., Park I.Y., Kim M.S., Kim S.C.; "A novel antimicrobial peptide from the loach, Misgurnus anguillicaudatus.";
                                                                                                                                                                               Litoria splendida, Litoria gilleni, and Litoria caerulea.
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Hylidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Misgurnus anguillicaudatus.
Eukaryota; Metazoa; Chordata; Craniata;
Actinopterygii, Neopterygii; Teleostei;
Cypriniformes; Cobitidae; Misgurnus.
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   AND MASS SPECTROMETRY OF 1.1; 1.1.1;
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MLP_RANTE
ATPE_MICLU
VGJ_BPALA
COXD_HUMAN
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Listing first

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Title: Perfect score:

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15-JUL-1998 (Rel.
CAERIN 1.2.
Litoria caerulea.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "The solution structure and activity of caerin 1.1, peptide from the Australian green tree frog, Litoria Eur. J. Biochem. 247:545-557(1997).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SPECIES-L. SPLENDIDA, MEDLINE-97409981; Pu
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Stone D.J.M., Waugh R.J., Bowle J.H., Wallace J.C., Tyler M.J.;
"Peptides from Australian frogs. The structures of the caerins from
Litoria caerula.";
                                                                                                                                                                                                                                                                                                                                                                Antibiotic;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FUNCTION: ANTIBACTERIAL AND ANTIVIRAL PEPTIDES THAT ADOPT AN ALPHA HELICAL CONFORMATION WHICH CAN DISRUPT BACTERIAL MEMBRANES. EACH CAERIN DISPLAYS A DIFFERENT ANTIMICROBIAL SPECIFICITY.
TISSUE SPECIFICITY: SECRETED BY THE SKIN PAROTOID AND/OR ROSTBAIL
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                                                                                                                                   LPHVVPVIAEH
                                                                                                                                                                            1 Similarity
4; Command
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S SPECTROMETRY: N
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Metazoa;
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36,
Chordata; Craniata; Vertebrata; Euteleostomi;
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MW-2412; METHOD-FAB; R
MW-2241; METHOD-FAB; R
MW-1421; METHOD-FAB; R
MW-1333; METHOD-FAB; R
MW-2333; METHOD-FAB; R
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Last sequence up
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: MW=1180; METHOD=FAB;
: MW=915; METHOD=FAB;
: Amphibian skin; Amid
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Pred. No. 5.2e
3; Mismatches
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CAERIN 1.1.1.
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CAERIN 1.1.3.
CAERIN 1.1.4.
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5.2e+02;
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RANGE=3-25.
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RANGE=1-23.
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RANGE=1-15.
RANGE=1-15.
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CAERIN 1.3
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SEQUENCE
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-I- FUNCTION: ANTIBACTERIAL PEPTIDE, THAT ADOPTS AN ALPICONFORMATION WHICH CAN DISRUPT BACTERIAL MEMBRANES.
DISPLAYS A DIFFERENT ANTIMICROBIAL SPECIFICITY.

-I- TISSUE SPECIFICITY: SECRETED BY THE SKIN PAROTOID AND ADDRESS AND ADDRESS AND ADDRESS AND THE SKIN PAROTOID AND ADDRESS AND
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-I- FUNCTION: ANTIBACTERIAL PETIDE, THAT ADOPTS AN ALPHA HELICAL CONFORMATION WHICH CAN DISRUPT BACTERIAL MEMBRANES. EACH CAER. DISPLAYS A DIFFERENT ANTIMICROBIAL SPECIFICITY.

-I- TISSUE SPECIFICITY: SECRETED BY THE SKIN PAROTOID AND/OR ROSTI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Stone D.J.M., Waugh R.J., "Peptides from Australian Litoria caerula.";
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TISSUE-PAROTOID GLAND;
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TISSUE-PAROTOID GLAND;
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Litoria.
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4; Conservative
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                                                                                              Conservative
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36, Last sequence 36, Last annotations
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15-JUL-1998
CAERIN 1.4.
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-!- MASS SPI
Antibiotic;
MEDITINE-72062338; PubMed-5126885;
Lote C.J., Weiss J.B.;
"Identification in urine of a low-molecular-weight his glycopeptide containing cysteinyl-galactose.";
Biochem. J. 123:25P-25P(1971).
-!- FUNCTION: THE IDENTITY OF THE GLYCOPROTEIN FROM WIS DERIVED IS UNKNOWN. NO PHYSIOLOGICAL FUNCTION
                                                                                                                                                                      GLUR_HUMAN
P02729;
                                                                                                                                                                                                                                                                                                                               PEPTIDE
MOD_RES
SEQUENCE
                                                                                              Homo sapiens (Human).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE, AND MASS SPECTROMETRY OF CAERIN 1.4.
SPECIES-L.CAERULEA; TISSUE-PAROTOID GLAND;
Stone D.J.M., Waugh R.J., Bowie J.H., Wallace J.C.,
"Peptides from Australian frogs. The structures of the caerula.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vo
Amphibia; Batrachia; Anura; Neobatrachia;
                                                                                                                              URINE GLYCOPEPTIDE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SPECIES=L.GILLENI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE,
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                                                                            SEQUENCE
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DOMAIN: CONTAINS
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SPECTROMETRY: MW=933; N
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3; Mismatches
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Catarrhini; Hominidae;
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P82023;
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Glycoprotein.
CARBOHYD
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Eukaryota; Metazoa; Chordata; Craniata; V.
Amphibia; Batrachia; Anura; Neobatrachia;
               SEQUENCE, AND MASS SPECTROTISSUE-PAROTOID GLAND;
Stone D.J.M., Waugh R.J.,
"Peptides from Australian"
                                                                                                                                                                                                                                                                                                               MEDLINE=97368637; PubMed=9225251;
Raftery M.J., Waugh R.J., Bowie J.H., Wallace
"The structures of the frenatin peptides from
the giant tree frog Litoria infrafrenata.";
J. Pept. Sci. 2:117-124(1996).
1- FUNCTION: WIDE SPECTRUM ANTIMICROBIAL PEPT
-1- TISSUE SPECIFICITY: SECRETED BY THE SKIN P
                                                                       Eukaryota; Metazoa; Chordata;
Amphibia; Batrachia; Anura; N
                                                                                        Litoria caerulea.
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Antibiotic; Amphibian skin.
SEQUENCE 24 AA; 2495 MW; 69
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138:910-936(1993)
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                 frogs.
                          Bowie J.H.,
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annotation
                                                                       Neobatrachia;
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Pred. No.
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8.9e+04;
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a; Bufonoidea;
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i; Hylidae;
                            Tyler M.J.;
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Antibiotic; Amphibian skin; Amidation.
MOD_RES 25 25
SEQUENCE 25 AA.
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SEQUENCE
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01-MAR-1989 (Rel. 10, Created)
01-MAR-1989 (Rel. 10, Last sequence up
01-OCT-1996 (Rel. 34, Last annotation
VASOACTIVE INTESTIBLE PETIDE (VIP) (Fig. 1)
                                                                                                                                                                                                                                                                                                                                                                                                                                    Gadus morhua (Atlantic cod).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutel
Eukaryota; Metazoa; Chordata; Teleostei; Buteleostei; Neol
Actinopterygii; Neopterygii; Teleostei; Gadiformes; Gadoidei;
                                                                                                                                                                                                                                                                                                                      Thwaites D.T., Young J., Thorndyke M.C., Dimaline R.;
"Isolation and characterisation of two teleost VIP's.";
Regul. Pept. 21:436-436(1988).
-: FUNCTION: VIP CAUSES VASODILATION, LOWERS ARTERIAL BLOOD PRESSORE, STIMULATES MYCCARDIAL CONTRACTILITY, INCREASES GLYCOGENOLYSIS AND RELAXES THE SMOOTH MUSCLE OF TRACHEA, AND GALL BLADDER.
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DOMAIN: CONTAINS TWO AMPHIPATHIC ALPHA
A REGION OF LESS-DEFINED HELICITY AND
                                                                                                                                                                                                                                                                            SIMILARITY: BELONGS TO THE JQ0361; JQ0361.
                                                                                                                                                                                                                                                                                                   MISCELLANEOUS: THERE IS ONLY A SINGLE DIFFERENCE BETWEEN SEQUENCE AND THAT OF CHICKEN (ALA-19 INSTEAD OF VAL-19).
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TISSUE SPECIFICITY: SECRETED BY THE SKIN PAROTOID AND/OR ROSTRAL
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1.1e+03;
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MEDLINE-96242312; PubMed-9026439;
Seeger M., OSOTIO G., Jerez C.A.;
"Phosphorylation of Groel, Dnak and other proteins froferrooxidans grown under different conditions.";
FEMS Microbiol. Lett. 138:129-134(1996).

-I- FUNCTION: PREVENTS MISFOLDING AND PROMOTES THE REF-
PROPER ASSEMBLY OF UNFOLDED POLYPEPTIDES GENERATED
CONDITIONS (BY SIMILARITY).

-I- SUBUNIT: OLIGOMER OF 14 SUBUNITS COMPOSED OF TWO 5
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PROSITE; PSO1177; ANAPHYLATOXIN_1; PARTIAL.

PROSITE; PSO1178; ANAPHYLATOXIN_2; PARTIAL.
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ULTHIFE
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P29134;
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60 KDA CHAPERONIN
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Varela P., Jerez C.A.;
"Identification and characterization of GroEL and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Goldberger G., Abraham G.N., Williams J., Colten H.R.; "NH2-terminal sequence analysis of pro-C4, the precursor fourth component of guinea pig complement."; J. Biol. Chem. 255:7071-7074(1980).

-I- FUNCTION: C4 PLAYS A CENTRAL ROLE IN THE ACTIVATION CLASSICAL PATHWAY OF THE COMPLEMENT SYSTEM. IT IS PR
                                                                                                                                                                                                                                                                                                                                                             Thiobacillus fer FEMS Microbiol.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 PRLLLF 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6 PRLIAF 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ANAPHYLATOXIN.
SUBUNIT: THIS PROTEIN IS SYNTHESIZED AS A SINGLE-CHAIN PRECURSOR SUBUNIT: THIS PROTEIN, IS ENZYMATICALLY CLEAVED TO FORM A TRIM.
7. SUBUNITS.
INDUCTION: BY HEAT SHOCK.
PTM: PHOSPHORYLATED ON THREONINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSICAL PATHWAY OF THE COMPLEMENT SYSTEM. IT IS PROCIACTIVATED C1 WHICH REMOVE FROM THE ALPHA CHAIN THE C4A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DF NONIDENTICAL CHAINS (ALPHA, BETA, AND GAMMA). A17267; A17267.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 porcellus
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; Metazoa; Chordata; Craniata; Vertebrata; Euteleosto
Eutheria; Rodentia; Hystricognathi; Caviidae; Cavia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19859;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                             ferrooxidans.";
ol. Lett. 77:149-153(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24, Creat
24, Last
39, Last
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gamma subdivision; Acidithiobacillus
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annotation update)
(CPN60) (GROEL PROTEIN) (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 23; DB
Pred. No. 1.46
1; Mismatches
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                                                                                                                               GENERATED UNDER
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                                                                               TWO
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STRESS
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Matches 5
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                                                                                                        CYCH_MOUSE STANDA
Q61458;
01-NOV-1997 (Rel. 35,
01-NOV-1997 (Rel. 35,
01-CCT-2000 (Rel. 40,
CYCLIN H (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Neuropeptide;
MOD_RES 1
SEQUENCE 13
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P41490;
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INTERPRO; IPRO01844; -.
PROSITE; P500296; CHAPERONINS_CPN60; PARTIAL.
Chaperone; ATP-binding; Heat shock; Phosphorylation.
NON_TER
23
23
SEQUENCE
23 AA; 2536 MW; 2BB6883872FB255D CRC64;
                                                                                        CCNH
                                                                                                                                                                                                                                           MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Isolation, identification and synthesis of Locus
IV, two additional neuropeptides of Locusta migra
locustamyotropin peptide family",
Insect Biochem, Mol. Biol. 22:447-452(1992).
- FUNCTION: POTENT MEDIATOR OF VISCERAL MUSCLE
- (MYOTROPIC ACTIVITY). LOW-MI IV SEEMS TO BE A
STIMULATOR THAN LOM-MI I, II AND III.
- SIMILARITY: BELONGS TO THE PYROKININ FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-NOV-1995 (Rel. 32, Last annotation update)
LOCUSTAMYOTROPIN 4 (LOM-MT-4).
Locusta migratoria (Migratory locust).
Locusta migratoria (Migratory locust).
Locusta migratoria; Arthropoda; Tracheata; Hexapoda;
Eukaryota; Neoptera; Orthopteroidea; Orthoptera; Cael
Pterygota; Neoptera; Orthopteroidea; Orthoptera; Cael
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-NOV-1995 (Rel.
01-NOV-1995 (Rel.
01-NOV-1995 (Rel.
                        Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                               Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INTERPRO; IPR001484; -. PROSITE; PS00539; PYROKININ; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TISSUE-BRAIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Acridomorpha;

    -!- MISCELLANEOUS: THIS PROTEIN SHOWS ATPASE ACTIVITY.
    -!- SIMILARITY: BELONGS TO THE CHAPERONIN (HSP60) FAMILY.

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5; Conser
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5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           identification and synthesis of locustamyotropin III and itional neuropeptides of Locusta migratoria: members of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Holman G.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
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3 AA;
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                                                                                                                                                                                                                    STANDARD;
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.. 32, Last sequence upo
1. 32, Last annotation v
                                                                                                                            35,
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1553 MW;
                        Chordata;
Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                  17.6%;
62.5%;
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33
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Last
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                                                                                                                            sequence update)
annotation update)
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Pred. No. 1.7e
5; Mismatches
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Pred. No. 1.1e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AMIDATION.
20861943824D6698
                    Craniata; Vertebrata;
Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRT;
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1.1e+03;
3;
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1.7e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 13;
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Caelifera;
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A MORE POTENT
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                        Euteleostomi;
; Murinae; Mus
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Best Local S
Matches 4
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01-NOV-1995
01-FEB-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hall F.L., Wu L.;

Submitted (NOV-1994) to the EMBL/GenBank/DDBJ databases.

FUNCTION: MEMBER OF CAK WHICH ACTIVATES CYCLIN-ASSOCIATED CDC2/CDK2/CDK4 BY THREONINE PHOSPHORYLATION. ITS EXPRESSION AND ACTIVITY ARE CONSTANT THROUGHOUT THE CELL CYCLE. CAK IS TIGHTLY ASSOCIATED WITH A MULTIFROTEIN COMPLEX TFIIH, WHICH PLAYS A DUAL ROLE IN TRANSCRIPTION AND DNA REPAIR (BY SIMILARITY).

ROLE IN TRANSCRIPTION AND DNA REPAIR (BY SIMILARITY).

1- SUBURIT: MAMMALIAN CAK CONTAINS THREE COMPONENTS: CDK7, CYCLIN HAND AN ASSEMBLY FACTOR CALLED MAT1.

-1- SUBCELLULAR LOCATION: NUCLEAR (BY SIMILARITY).
                                                                                                  MOD_RES
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation—the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                              Neuropeptide; Amidation.
                                                                                                                                                                                                                                                                   Ascaris suum (Pig roundworm) (Ascaris lumbricoides).
Eukaryota; Metazoa; Nematoda; Chromadorea; Ascaridida;
                                                                                                                                                                                                                                                                                          01-NOV-1995 (Rel. 32, Created)
01-NOV-1995 (Rel. 32, Last sequence update)
01-FEB-1996 (Rel. 33, Last annotation updat
FMRFAMIDE-LIKE NEUROPEFTIDE AF7.
                                                                                                                                                                                                                                                                                                                                              FAR7_ASCSU
P43171;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Transcription regulation.
NON_TER 1 1
NON_TER 18 18
SEQUENCE 18 AA; 2105 M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PROSITE; PS00292; CYCLINS; PARTIAL.
Cyclin; Cell cycle; Cell division; Nuclear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; X82441; CAA57822.1; -. HSSP; P51946; 1KXU.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A. STRAIN-CD-1; TISSU
                                                                                                                                                                            Ascaris suum.
                                                                                                                                                                                                       Cowden C.
                                                                                                                                                                                                                 MEDLINE-95380362; PubMed-7651904;
                                                                                                                                                                                                                               SEQUENCE
                                                                                                                                                                 Peptides
                                                                                                                                                                                                                                                       Ascarididae;
                                                                                                                                                                                           Eight novel
                                                                                                                                                                                                                                                                                                                                                                                                                          10 PRIIMLT
6 PRLIAF 11
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                                                                                                                                                     SIMILARITY:
                                                                                                                                        FAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRLIAFT
                                     Similarity
4; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                   16:491-500(1995).
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                                                                                                                                                                                                       Stretton
                                      Conservative
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                                                                                                                                                                                           FMRFamide-like
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2105 MW;
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57.1%;
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; Pred. No. 8.9e
0; Mismatches
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9CD40059D417687D
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Pred.
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1.6e+03;
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                                                  DB 1; 8.9e+04;
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          This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstatton the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Dinocera P.P., Blasi F., Dilauro R., Frunzio R., Brur "Nucleotide sequence of the attenuator region of the of Escherichia coli K-12.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE-82059525; PubMed-6170941;
Verde P., Frunzio R., di Nocera P.P., Blasi F., Bruni C.B.;
Verde P., Frunzio R., di Nocera P.P., Blasi F., Bruni C.B.;
"Identification, nucleotide sequence and expression of the regulatory
region of the histidine operon of Escherichia coli K-12.";
Nucleic Acids Res. 9:2075-2086(1981).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE-89094829; PubMed-3062174; Carlomagno M.S., Chlariotti L., Alifano P. "Structure and function of the Salmonella coli K-12 histidine operons."; J. Mol. Biol. 203:585-606(1988).
                                                                                                                                                              Submitted
                                                                                                                                                                               Barnes W.M.,
                                                                                                                                                                                            SEQUENCE FROM N.A.
SPECIES-S.TYPHIMURIUM;
                                                                                                                                                                                                                                                       "DNA sequence
histidine code
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MEDLINE=79033822; PubM
                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                            Science
                                                                                                                                                                                                                                                                                                                                                                                        Mau B., Shao Y.;
                                                                                                                                                                                                                                                                                                                                                                                                   Blattner F.R., Plunkett G. III, Bloch C.A., Perna N.T., Burland Riley M., Collado-Vides J., Glasner J.D., Rode C.K., Mayhew G.F. Gregor J., Davis N.W., Kirkpatrick H.A., Goeden M.A., Rose D.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                SPECIES=E COLI; STRAIN=K12 / MG16
MEDLINE=97426617; PubMed=9278503;
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P03058;
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                                                                                                                               FUNCTION: THIS PROTEIN IS INVOLVED IN THE ATTENUATION MECHANISM FOR THE CONTROL OF THE EXPRESSION OF THE HIS STRUCTURAL GENES.
                                                                                                                                                                                                                                                                                                                                                         complete genome sequence of Escherichia coli K-12."; nce 277:1453-1474(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Natl. Acad.
                                                                                                                                                             M., Husson R.N., Whittier R.; (AUG-1989) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                       codons
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9; PubMed=3062174;
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PEPTIDE (ATTENUATOR PEPTI
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37,
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así F., Dilauro R.,
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PubMed=360216;
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ria; gamma subdivision; Enterobacteriaceae;
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EMBL; V00284; CAA23548.1; -.
EMBL; X13462; CAA31810.1; -.
EMBL; V03371; CAA24656.1; -.
EMBL; AB000293; AAC75079.1; -.
EMBL; X13464; CAA31821.1; -.
EMBL; J01804; AAA88613.1; -.
PIR; A03594; LEECH.
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01-FEB-1994
01-OCT-2000
                                                                               NON_TER
SEQUENCE
                                                                                                     Transport;
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P33027
                                                                                                                                                                                                                                                                        "The PEP: fructose phosphotransferase system in Salmonella typhimurium: FPr combines enzyme IIIFru and pseudo-HPr activities."; mol. Gen. Genet. 216:517-525(1989).

-I- FUNCTION: INVOLVED IN THE EFFLUX OF SUGARS. THE PHYSIOLOGICAL ROI MAY BE THE DETOXIFICATION OF NON-METABOLIZABLE SUGAR ANALOGS. CAN TRANSPORT LACTOSE AND GLUCOSE (BY SIMILARITY).

-I- SUBCELLULAR LOCATION: INTEGRAL MEMBRANE PROTEIN. INNER MEMBRANE
                                                                                                                                                                      the European Bioinformatics Institute. The use by non-profit institutions as long modified and this statement is not removed. entities requires a license agreement (See
                                                                                                                                                                                                                    This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation.
                                                                                                                                                                                                                                                                                                                                                                                                               Bacteria; Proteobacteria;
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STYGENE; SG10166; HISL.
Histidine biosynthesis;
SEQUENCE 16 AA; 2081
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5; Conserva
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22 AA;
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33.3%;
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MW; C8B7907BF6283BBA CRC64;
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                        Score 21; DB Pred. No. 2.8e 1; Mismatches
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Pred. No.
1; Mismatc
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GAE6_RANRU
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01-NOV-1995
01-NOV-1995
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P82152;
30-MAY-2000
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Rana rugosa (Frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Eukaryota; Metazohia; Anura; Neobatrachia; Ranoidea;
                                                                                                                                                                                                         Cydia pomonella (Codling moth).
Cydia pomonella (Codling moth).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Endopterygota; Lepidoptera; Glossata; Ditrysia;
Tortricoidea; Tortricidae; Olethreutinae; Cydia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-MAY-2000 (Rel. 39, Created)
30-MAY-2000 (Rel. 39, Last sequence up
30-MAY-2000 (Rel. 39, Last annotation
CYDIASTATIN 1.
                                                                                                                                             Neuropeptide; Amidation.
MOD_RES 8 8
SEQUENCE 8 AA; 934 MW;
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DISULFID 18 24
SEQUENCE 24 AA; 2610 MW;
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- FUNCTION: HAS A NON-HEMOLYTIC ACTIVITY. HAS A BROAD SPECTRUM ACTIVITY AGAINST BOTH GRAM POSITIVE AND GRAM NEGATIVE BACTERIFUNGI AND PROTOZOA.
                                                                                                                                                                                                                                                                                                                    TISSUE=LARVA;
MEDLINE=98054539; PubMed=9392829;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE-95091844; PubMed-7999137; Park J.M., Jung J.-E., Lee B.J.;
                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -!- SUBUNIT: MONOMER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Antimicrobial peptides from the skin of a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
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nes 4; Conserv
    13 SEHSHFSL 20
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C82879C45B51F775 CRC64;
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Pred. No. 3.1e
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3.1e+03;
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Ranidae; Rana
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RESULT 19
GLEM_HUMAN STANDARD; PRT; 10 AA.
ID GLEM_HUMAN STANDARD; PRT; 10 AA.
AC P02728;
DT 21-JUL-1986 (Rel. 01, Created)
DT 21-JUL-1986 (Rel. 01, Last sequence update)
DT 21-JUL-1986 (Rel. 01, Last sequence update)
DT 21-JUL-1986 (Rel. 01, Last annotation update)
DT 21-JUL-1986 (Rel. 01, Last sequence update)
DE ENTHROCYTE MEMBRANE GLYCOPETIDE.

OC Mammalia; Eutheria; Primates; Catarrhini; Homin SEQUENCE.
RY MEDILNE-72034940; PubMed=5286858;
RY MEDILNE-72034940; PubMed=52
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Meiss J.B., Lote C.J., Bobinski H.;
Weiss J.B., Lote C.J., Bobinski H.;
"New low molecular weight glycopeptide containing triglucosylcysteir
in human erythrocyte membrane.";
nature New Biol. 234:25-26(1971).
-i- pTM: S-IINKED GLYCAN CONSISTS OF GLC-GLC-GLC TRISACCHARIDE.
-i- MISCELLANEOUS: THE IDENTITY OF THE GLYCOPROTEIN FROM WHICH THIS
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1- FUNCTION: STIMULATES THE SECRETI-
FOLLICLE-STIMULATING HORMONES.
-1- SIMILARITY: BELONGS TO THE GNRH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE-86168192; PubMed-3514603;
Sherwood N.M., Sower S.A., Marshak D.R., Fraser B.A.,
"Primary structure of gonadotropin-releasing hormone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (LULLBERIA 1.).
Petromyzon marinus (Sea lamprey).
Pukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Eukaryota; Metazoa; Petromyzontidae; Petromyzon.
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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RPRO; IPR002012; -.; PF00446; GNRH; 1.
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STIMULATES THE SECRETION OF BOTH
FIMULATING HORMONES.
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Pred. No. 1.8e+03;
0; Mismatches 0;
PYRROLIDONE CARBOXYLIC ACID.
AMIDATION.
1E4B36237B1735AB CRC64;
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P07448;
01-APR-1988
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MEDLINE-98324954; PubMed-9657989;

MEDLINE-98324954; PubMed-9657989;

Seibert V., Kourbatova E.M., Golovleva L.A., Schloemann M.;

Seibert V., Kourbatova E.M., Golovleva L.A., Schloemann M.;

"Characterization of a maleylacetate reductase encoding region from Rhodococcus opacus ICP.";

J. Bacteriol. 180:3503-3508(1998).

-i- PARHWAY: 3-CHLOROCATECHOL DEGRADATION (BETA-KETOADIPATE PATHWAY).

THIS PATHWAY SERVES A VITAL ROLE IN THE BIODEGRADATION OF TOXIC AROMATIC COMPOUNDS INTRODUCED IN THE ENVIRONMENT BOTH AS NATURAL PRODUCTS AND AS INDUSTRIAL EFFLUENT.

-i- SIMILARITY: BELONGS TO THE IRON-CONTAINING ALCOHOL DEHYDROGENASE FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                   PROSITE;
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P56870;
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01-MAR-1989 (Rel. 10, Last annotation update)
DENTINAL FLUID TRANSPORT-STIMULATING PEPTIDE
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01-APR-1988 (Rel. 07,
01-MAR-1989 (Rel. 10,
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30-MAY-2000 (Rel. 39, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
PUTATIVE MALEYLACETATE REDUCTASE II (EC 1.3.1.32)
 Stimulating peptide Chem. Pharm. Bull.
 "Isolation and amino acid sequence of stimulating peptide from rat parotid gChem. Pharm. Bull. 34:3803-3811(1986).
                                     TISSUE=PAROTID GLAND;
MEDLINE-87131231; PubMe
Yamamoto T., Kobayashi
Aonuma S.;
                                                                                                               Mammalia;
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Bacteria; Firmicutes; Actinobacteria;
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PS00060; ADH_IRON_2; PARTIAL.
hydrocarbons_catabolism; Oxidoreductase;
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Rodentia;
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57.1%;
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2; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         'n
                                                                                                                                                                                                                                                                                                                                                                                                58DA90DD038F025E CRC64;
                                                                                                             Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nocardiaceae;
           glands
                         dentinal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Actinobacteridae;
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1.8e+03;
                                                                                                                                                                                                                                                                                                                                                             DB 1;
                                                  Yamamoto
                                                                                                                                                                                                                           A
                                                                                                                                                                                                                                                                                                                                               .8e+03;
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                                                                                                                                                                                                                                                                                                                                                          Length 15;
                           fluid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rhodococcus
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                         transport-
                                                  Nomura
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RESULT 23
LPTR_BACST
ID LPTR_B
AC P05658
DT 01-NOV
DT 01-NOV
DT 01-SED
DE TETRAC
GN TETL
OS Staphy
OG Plasmi
OC Bactil
RN [1]
RP PLASMI
RX MEDLIN

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Best Local S
Matches 5
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CHARACTERIZATION.
MEDLING-67131708; F
Steinman R.R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-NOV-1988
01-NOV-1988
01-FEB-1995
                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
SPECIES-S.HYICUS; PLASMID-PSTE1;
SPECIES-S.HYICUS; PLASMID-PSTE1;
MEDLINE-92321725; PubMed-1622166;
MEDLINE-92321725; PubMed-162216;
Schwarz S., Cardoso M., Wegener H.C.;
Schwarz S., Cardoso M., Wegener H.C.;
"Nucleotide sequence and phylogeny of the
"Nucleotide sequence and phylogeny of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "The movement of Acriflavine hydrochloride through molars of a cariogenic and non-cariogenic diet.";
J. South. Calif. Dent. Assoc. 35:151-157(1967).
-1. FUNCTION: THIS PREPTIDE STIMULATES THE TRANSPORT OF DENTIN WHICH IS IMPORTANT FOR THE PREVENTION OF DENTAL CARIES.
PIR; JJ0001; DIRT.
Dental caries; Parotid gland; Hormone.
                                             This SWISS-PROT entry is copyright. It is produced through a collab between the Swiss Institute of Bioinformatics and the EMBL outst the European Bioinformatics Institute. There are no restrictions use by non-profit institutions as long as its content is in modified and this statement is not removed. "Usage by and for comentities requires a license agreement (See http://www.isb-sib.ch/an or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LPTR_BACST
P05658;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Staphylococcus hyicus.
Plasmid pTHT15, Plasmid pBC16,
Bacteria; Firmicutes; Bacillus,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDIINE=90221899; PubMed=2109312;
Palva A., Vidgren G., Simonen M., Rintala
"Nucleotide sequence of the tetracycline i
from Bacillus cereus.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDILINE-86031344; PubMed=2996983;
Hoshino T., Ikeda T., Tomizuka N., Furukawa K.;
"Nucleotide sequence of the tetracycline resist
thermophilic Bacillus plasmid: comparison with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TETRACYCLINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Dental caries; Parotid gland; SEQUENCE 20 AA; 2165 MW;
                                                                                                                                                                                                                                                Antimicrob. Agents Chemother. 36:580-588(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nucleic Acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PLASMID-PTHT15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bacillus/Staphylococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bacillus stearothermophilus, Bacillus cereus,
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     D00006;
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(Rel.
(Rel.
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       BAA00004.1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09, Created)
09, Last sequence up
31, Last annotation
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Pred.
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s/Clostridium
Bacillus.
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3.7e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a H., Laaman
resistance
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               resistance gene of pTHT15, with staphylococcal TcR
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stance gene
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from Staphylococcus
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RESULT 24
CYSP_TRIVA
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Matches 4
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Best Local :
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NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CYSP_TRIVA STANDARD; PRT; 22 AA. 733404; Created) 01-FEB-1994 (Rel. 28, Created) 01-FEB-1994 (Rel. 28, Last sequence update) 01-NOV-1995 (Rel. 32, Last annotation update) CYSTEINE PROTEINASE (EC 3.4.22.-) (FRAMENT). Trichomonas vaginalis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; M11036; AAA22850.1; -.
EMBL; X51366; CAA35750.1; -.
EMBL; X50828; CAA42319.1; -.
PIR; S09233; LFBSTU.
PIR; S23742; S23742; S23742.
Leader peptide; Antibiotic resistance; Plasmid.
Leader peptide; Antibiotic resistance; Plasmid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE=93307628; pubMed=8319888; Irvine J.W., Coombs G.H., North M.J.; reprise training for the proteinases from trichomonads using bacitracin-Sepharose."; FEMS Microbiol. Lett. 110:113-120(1993).
-:- SIMILARITY: BELONGS TO PEPTIDASE FAMILY C1; ALSO KNOWN AS PAPAIN FAMILY OF THIOL PROTEASES.

MEROPS; C01.082; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota;
[1]
                                                                                                     LPER_STRFR STANDARD; PRT; 24 AA.

P45440;
01-NOV-1995 (Rel. 32, Created)
01-NOV-1995 (Rel. 32, Last sequence update)
01-NOV-1995 (Rel. 32, Last annotation update)
ERYTHROMYCIN RESISTANCE LEADER PEPTIDE (23S RRNA METHYLASE LEADER
                                                                                                                                                                                                                                                                                                                                                                                                         INTERPRO; IPRO00169; -.

PROSITE; PS00139; THIOL_PROTEASE_CYS; PARTIAL.

PROSITE; PS00639; THIOL_PROTEASE_HIS; PARTIAL.

PROSITE; PS00640; THIOL_PROTEASE_ASN; PARTIAL.
                                                                 Streptomyces fradiae.
Bacteria; Firmicutes; Actinobacteria; Actinobacteridae;
                                                                                          PEPTIDE).
                                                                                                                                                                                                                                                                                                                                                                                               Hydrolase; Thiol protease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
SEQUENCE FROM N.A.
MEDLINE-88169508; PubMed-3127381;
Kamimiya S., Weisblum B.;
                                                   Actinomycetales; Streptomycineae;
                                                                                                                                                                                                                                      21 KKGA 24
||||
9 KKGA 12
                                                                                                                                                                                                                                                                                         Local Similarity
nes 4; Conserv
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4; Conserv
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nilarity 33.3%;
Conservative
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                                                                                                                                                                                                                                                                                                                                                           2398 MW;
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0; Mismatches
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Pred. No. 3.7e
4; Mismatches
                                                                                                                                                                                                                                                                                                                                                           OEE40FD86661ACCB CRC64;
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                                                     Streptomycetaceae;
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3.7e+03;
                                                                                                                                                                                                                                                                                                      DB 1; L
. 4.le+03;
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                                                     Streptomyces
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Job time: 356 sec
                                                                                                                                                            Query Match
Best Local Similarity
Matches 4; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       J. Bacteriol. 170:1800-1811(1988).
-i- EUNCTION: THIS PEPTIDE IS INVOLVED IN THE CONTROL MECHANISM OF THE SYNTHESIS OF THE MACROLIDE-LINCOSAMIDE-STREPTOGRAMIN B RESISTANCE PROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Translational attenuation control of ermSF, an inc
determinant encoding rRNA N-methyltransferase from
fradiae.";
                                                                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                                                                     EMBL; M19269; AAA26741.1; -. Antibiotic resistance; Leade
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -1- CAUTION: IT IS UNCERTAIN WHETHER MET-1 OR MET-3 IS THE INITIATOR.
                                                                                     |:|| |
4 GIAARP 9
                                                                                                                        1 GMAALP 6
                                                                                                                                                                                                                                                      resistance; Leade
24 AA; 2529 MW;
                                                                                                                                                              Conservative
                                                                                                                                                                               16.0%;
                 'n
                                                                                                                                                                                                                                                      Leader peptide.
9 MW; 756C1635F8C5F06A CRC64;
                   2001, 11:34:14
                                                                                                                                                            Score 20; DB 1;
Pred. No. 4.4e+03;
1; Mismatches 1
                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   inducible resistance rom Streptomyces
                                                                                                                                                                Indels
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                                                                                                                                                                0;
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GenCore version 4.5
Copyright (c) 1993 - 2000 Compugen Ltd.
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OM protein - pr Run on:	OM protein - protein search, using sw model Run on: February 5, 2001, 10:59:09 ; Search time 189.33 Seconds
	(without alignments) 3.612 Million cell updates/sec
Title: Derfect score:	US-09-343-406-3
Sequence:	1 ERGKMIPSDLERRILEAKOK 20
Scoring table:	BLOSUM62
	Gabob 10.0 , Gabext 0.5

141170 Total number of hits satisfying chosen parameters: Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries Minimum DB seq length: 0 Maximum DB seq length: 25

268485 seqs, 34193795 residues

Searched:

Database :	A_Geneseq_36:*
	1: /SIDS1/gcgdata/geneseq/geneseqp/AA1980.DAT:*
	2: /SIDS1/gcgdata/geneseq/geneseqp/AA1981.DAT:*
	3: /SIDS1/gcgdata/geneseq/geneseqp/AA1982.DAT:*
	4: /SIDS1/gcgdata/geneseg/genesegp/AA1983.DAT:*
	5: /SIDS1/gcgdata/geneseq/geneseqp/AA1984.DAT:*
	6: /SIDS1/gcgdata/geneseq/geneseqp/AA1985.DAT:*
	7: /SIDS1/gcgdata/geneseq/geneseqp/AA1986.DAT:*
	8: /SIDS1/gcgdata/geneseq/geneseqp/AA1987.DAT:*
	9: /SIDS1/gcgdata/geneseq/geneseqp/AA1988.DAT:*
	10: /SIDS1/gcgdata/geneseq/geneseqp/AA1989.DAT:*
	11: /SIDS1/gcgdata/geneseq/geneseqp/AA1990.DAT:*
	12: /SIDS1/gcgdata/geneseq/genesegp/AA1991.DAT:*
	13: /SIDS1/gcgdata/geneseq/genesegp/AA1992.DAT:*
	<pre>14: /SIDS1/gcgdata/geneseq/geneseqp/AA1993.DAT:*</pre>
	15: /SIDS1/gcgdata/geneseq/geneseqp/AA1994.DAT:*
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	19: /SIDS1/gcgdata/geneseg/genesegp/AA1998.DAT:*
	20: /SIDS1/gcgdata/geneseq/genesegp/AA1999.DAT:*
	21: /SIDS1/gcgdata/geneseq/geneseqp/AA2000.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	Description	Human glutamic act	Glutamic acid deca	GAD65 fragment, pe	65 kD Glutamic act	Peptide derived fr	65 kD Glutamic aci	Lecithin: cholester	Lecithin: cholester	Lecithin:cholester	Lecithin: cholester	Streptokinase deri	Lecithin:cholester
SUMMARIES	QI	R88668	R72281	Y59554	W18849	R76642	W18850	X19062	X18808	Y18545	Y19316	Y25018	X19063
		16	16	21	18	16	18	20	20	50	20	20	20
	Query Match Length DB	20	20	20	20	14	14	22	22	. 22	22	20	22
46	Query Match	100.0	94.9	94.9	89.8	41.8	41.8	36.7	36.7	36.7	36.7	34.7	33.2
	Score	86	93	93	88	41	41	36	36	36	36	34	32.5
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Lecithin:cholester Lecithin:cholester Lecithin:cholester Pulmonary surfacta Sequence from eryt Dulmonary surfacta	Lecithin: cholester Lecithin: cholester Lecithin: cholester Lecithin: cholester Lecithin: cholester	Lecithin:cholester Lecithin:cholester Lecithin:cholester Plasmid pBMS-1 pol Human hypoxia indu Lecithin:cholester	Lecithin: cholester	Lecithin: cholester Lecithin: cholester Lecithin: cholester Lecithin: cholester Fragment of human Lecithin: cholester Lecithin: cholester Lecithin: cholester Lecithin: cholester Lecithin: cholester
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111111 14111 14111	222092	4000000 4000000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	28844444 289048848

ALIGNMENTS

diabetes; T-cell subpopulation; detection; antigen production; diagnosis; autoimmune disease. Human glutamic acid decarboxylase residues 306-325. R88668 standard; peptide; 20 AA. 05-MAR-1996 (first entry) R88668; RESULT R88668

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94DE-4418091. 94DE-4403522. 94DE-4401629. 04-FEB-1994; 20-JAN-1994; Homo sapiens DE4418091-A1. 24-MAY-1994; 27-JUL-1995.

(ENDL/) ENDL J. (BOEF) BOEHRINGER MANNHEIM GMBH.

Albert W, Dornmair K, Endl J, Jung G, Meinl E; Stahl P, Schendel D;

WPI; 1995-264505/35.

Antigen-specific activated T-lymphocytes and their detection - by interaction with inventive peptide(s) of peptide-MHC complexes; useful in diagnosis of e.g. diabetes and auto:immune diseases

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Ameliorating glutamic acid decarboxylase associated autoimmune disorders such as insulin dependent diabetes mellitus and Stiff man
                                                                                                                                                                                               GAD65; glutamic acid decarboxylase 65; autoimmune disorder; IDDM; insulin dependent diabetes mellitus; Stiff man disease; diagnosis;
                                                                                               Y59554 standard; peptide; 20 AA.
                      2 ergkmipsdlerrileakg 20
                                                                                                                                                                        GAD65 fragment, peptide #21
          1 ERGKMIPSDLERRILEAKQ 19
                                                                                                                                                (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                           Kaufman DL,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ameliorating
                                                                                                                                                03-APR-2000
                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                          09-APR-1997;
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                                             decarboxylase and specifically reacts with a T-cell sub-population isolated from recently diagnosed Type: diabetics. Pharmaceutical composns. conty, this peptide and those shown in R88667 and R76642-62, are useful for the diagnosis of a disease or predispositions of immune system diseases, tumours, and autoimmune diseases, including diabetes. The peptides are able to detect specific T-cell subpopulations that are then used for antigen prodn., e.g. by reinjection.
                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q86481 and Q86482 encode R71733 and R79105, rat and human glutamic acid decarboxylase (GAD65) respectively, from which the GAD65 fragments described in R72261-R72298 were derived. These fragments can be used to detect autoontibodies against GAD, e.g. to diagnose and treat GAD-related autoimmune disorders, such as insulin dependant diabetes mellitus or stiff man disease.
                                                                                                                                                                                                             ö
                                  R88668 is derived from residues 306-325 of human glutamic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New polypeptide fragments of glutamic acid decarboxylase - for diagnosis and treatment of auto:immune disease, esp. insulin dependent diabetes, also related nucleic acid, vectors, antibodies, hybridoma(s) etc.
                                                                                                                                                                                   Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                         Glutamic acid decarboxylase; GAD65; auctimmune disorders; insulin-dependant diabetes mellitus; stiff man disease.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kaufman DL, Tobin AJ;
                                                                                                                                                                                   100.0%; Score 98; DB 16; 100.0%; Pred. No. 4.3e-10;
                                                                                                                                                                                                                                                                                                                                                                                                  Glutamic acid decarboxylase (GAD65) fragment.
                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; Page 76; 100pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Clare-Salzler MJ, Erlander MG,
                                                                                                                                                                                                                                                                                                                         R72281 standard; Peptide; 20 AA
          Claim 1; Page 14; 21pp; German.
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                                                                                                                                                                                                            20; Conservative
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Best Local Similarity
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                                                                                                                                                 Sequence
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Erlander MG;

95US-0485725. 90US-0586536. 91US-0716909. 97US-0827618.

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                                       This sequence represents a fragment of the glutamic acid decarboxylase 65 (GAD65) protein. The invention relates to a method of ameliorating GAD associated autoimmune disorders by administering a GAD65 peptide to the patient. The method can be used for ameliorating GAD associated autoimmune disorders such as IDDM (insulin dependent diabetes mellitus) and Stiff man disease. GAD65 can also be useful for screening drugs that immunoassays. GAD65 is an effective diagnostic tool for predicting nom the diagnosis is quite easy. It is also possible to obtain much larger quantities of polypeptide via recombinant techniques than are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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Pred. No. 3e-09;
0; Mismatches 0
Claim 1; Column 42; 61pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                    94.9%; Scc.
100.0%; Pre
0;
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Best Local Similarity
Matches 19; Conserv
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Gaps

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94.9%; Score 93; DB 16; Length 20; larity 100.0%; Pred. No. 3e-09; Conservative 0; Mismatches 0; Indels

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Synthetic.

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specifically react with T-cell sub-populations isolated from recently diagnosed Type-I diabetics. Pharmaceutical compsns. contg. these peptides and those shown in R88668-72, are useful for the diagnosis of a disease or predispositions of immune system diseases, tumours, and autoimmune diseases, including diabetes. The peptides are able to detect specific T-cell subpopulations that are then used for antigen prodn.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAD; 65 kD; human; glutamic acid decarboxylase; autoreactive; diagnosis; insulin-dependent diabetes mellitus; IDDM; cell-mediated disease; predisposition; autoimmune; tumour; rheumatoid arthritis; multiple sclerosis.
                                                                                                                                                                                                                                                 Antigen-specific activated T-lymphocytes and their detection -
interaction with inventive peptide(s) of peptide-MHC complexes;
useful in diagnosis of e.g. diabetes and auto:immune diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   41.8%; Score 41; DB 16; Length 14; 100.0%; Pred. No. 1.1;
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                                                                                                   (ENDL/) ENDL J.
(BOEF ) BOEHRINGER MANNHEIM GMBH.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      W18850 standard; peptide; 14 AA.
                                                                                                                                                                                                                                                                                                                          Claim 1; Fig 1; 21pp; German.
           94DE-4418091.
                                               94DE-4403522.
94DE-4401629.
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                                                                                                                                                         Dornmair K,
Schendel D;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          e.g. by reinjection
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Best Local Similarity
Matches 8; Conserv
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                                             04-FEB-1994;
20-JAN-1994;
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                                                                                                                                                         Albert W,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             W18842-70 are peptide fragments of the 65 kD human glutamic acid decarboxylase (GAD). The fragments are autoreactive substances used for diagnosis of insulin-dependent diabetes mellitus (IDDM). The diagnosis is determined by using a claimed method for diagnosis of cell-mediated diseases or a predisposition to cell-mediated diseases, which is effected by administering an autoreactive substance intradermally and establishing the diagnosis on the basis of the occurrence or lack of a positive reaction at the site of administration. The method is used for diagnosis of autoimmune and tumour diseases, preferably T-cell-mediated diseases such as rheumatoid arthritis, multiple sclerosis and especially IDDM.
                                                                                GAD: 65 kD; human; glutamic acid decarboxylase; autoreactive; diagnosis; insulin-dependent diabetes mellitus; IDDM; cell-mediated disease; predisposition; autoimmune; tumour; rheumatoid arthritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
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                                             65 kD Glutamic acid decarboxylase peptide fragment VIII.
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                                                                                                                                                                                                                                                                                                                                                          (BOEF ) BOEHRINGER MANNHEIM GMBH.
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         05-JAN-1998 (first entry)
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Pozzilli P, Stahl P;
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                                                                                                                                       multiple sclerosis
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tes 18; Conserv
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Query Match

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dyslipidemia, specifically hypercholesterolaemia, cardiovascular disease, atherosclerosis, restenosis, HDL (high density lipoprotein) or apoA-I deficiency; hypertriglyceridemia and metabolic syndrome, also for treating septic shock. When labeled, (A) can also be used diagnostically to measure serum levels of HDL, in particular the HDL subpopulation that is involved in retrograde cholesterol transport, also to image HDL at e.g. atherosclerotic streaks, and to raise antibodies. Y18934 to Y19187 represent lecithin:cholesterol acyltransferase (LCAT) activity exhibiting core peptides, which are apoA-I agonists.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Apolipoprotein A-I; agonist; dyslipidemic disorder; dyslipidemia; human; lecithin:roblesterol acyltransferase; LGMT; hypercholesterolaemia; cardiovascular disease; atheroseclerosis; restenosis; HDL; apoA-I; high density lipoprotein; hypertriglyceridemia; metabolic syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention describes an agonist (A) of apolipoprotein A-I dapoal) which is a 14-22 residue peptide, or analog, that forms an amphipathic alpha-helix in presence of lipids. (A), and their lipid complexes, are used to treat or prevent diseases associated with disklipidemia, specifically hypercholesterolaemia, rardiovascular disease, atherosclerosis, restenosis, HDL (high density lipoprotein) or apoA-I deficiency; hypertriglyceridemia and metabolic syndrome, also for treating septic shock, when labeled, (A) can also be used disponsitionly to measure serum levels of HDL, in particular the HDL subpopulation that is involved in retrograde cholesterol transport, also to image HDL at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Lecithin: cholesterol acyltransferase activation exhibiting peptide #129.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Peptide agonists of apolipoprotein A-I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example; Page 111; 152pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dasseux J,
                                                                                                                                                                                                                                                                                                                                                                                                Y18808 standard; Peptide; 22 AA.
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tes 8; Conserv
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|7 ndllrellealgk
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DASSEUX J.
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                                                                                                                                                                   22 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEKUL R
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo saptens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               septic shock
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic
                                                                                                                                                                     Sequence
                                                                                                                                                                                                                  Query Match
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(SEKU/) S
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(DASS/)
                                                                                                                                                                                                                                                                                                                                                                                                                                X18808;
                                                                                                                                                                                                                                     Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                  RESULT
                                                                                                                                                                                                                                                                                                                                                                                  Y18808
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                                                                                              decarboxylase (GDD). The fragments are autoreactive substances used for diagnosis of insulin-dependent diabetes mellitus (IDDM). The diagnosis is determined by using a claimed method for diagnosis of cell-mediated diseases or a predisposition to cell-mediated diseases, which is effected by administering an autoreactive substance intradermally and establishing the diagnosis on the basis of the occurrence or lack of a positive reaction at the site of administration. The method is used for diagnosis of autoimmune and tumour diseases, preferably T-cell-mediated diseases such as rheumatoid arthritis, multiple sclerosis and especially IDDM.
                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Apolipoprotein A-I; agonist; dyslipidemic disorder; dyslipidemia; human; lecithin:roblesterol acyltransferase; LCAT; hypercholesterolaemia; cardiovascular disease; atherosclerosls; restenosis; HDL; apoA-I; high density lipoprotein; hypertriglyceridemia; metabolic syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Lecithin:cholesterol acyltransferase activation exhibiting peptide #129
                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention describes an agonist (A) of apolipoprotein A-I (apoA-I) which is a 15-29 residue peptide, or analog, that forms an amphipathic alpha-helix in presence of lipids. (A), and their lipid complexes, are used to treat or prevent diseases associated with
   diabetes
                                                                               W18842-70 are peptide fragments of the 65 kD human glutamic acid
                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                               41.8%; Score 41; DB 18; Length 14;
100.0%; Pred. No. 1.1;
tive 0; Mismatches 0; Indels
for diagnosis of cell-mediated diseases, esp. aintradermal admin. of auto:reactive substances
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Y19062
ID Y19062 standard; Peptide; 22 AA.
                                                Claim 11; Fig 1; 12pp; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         98WO-US20326
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Best Local Similarity
Matches 8; Conserva
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DASSEUX J.
                                                                                                                                                                                                                                                                14 AA;
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SEKUL R.
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 Skin test
involving
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(METZ/)
(SEKU/)
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Indels

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Score 36; DB 20; Pred. No. 12; 2; Mismatches 3

36.7%; 61.5%;

Conservative

Query Match Best Local Similarity Matches 8; Conserv

8 SDLERRILEAKOK 20

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Length 22;

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The present invention describes a nucleic acid (A) encoding an apolipoprotein A-I (apoA-I) agonist (B) that is a peptide, or analog, which forms an amphipathic alpha-helix in presence of lipids. (A), optionally as a complex with lipids, and host cells that contain (A), are useful for gene therapy, or prevention, of diseases associated with a therosclerosis, specifically hypercholesteroleamia, cardiovascular disease, atherosclerosis, restenosis, HDL (high density lipoprotein) and apoA-I deficiency, hypertriglyceridemia and metabolic syndrome, also to treat endotoxemia (spetic shock). Host cells containing (A) can also be used to study the role of apoA-I in lipid metabolism. (B) can be used diagnostically, e.g. to measure serum HDL (particularly its subpopulation involved in retrograde cholesterol transport) and for imaging the circulatory system or HDL accumulations at fatty streaks. The present sequence represents a peptide from the present invention.
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                                                                                                                                                                                                                                                                                                                                                                                   Lecithin: cholesterol acyltransferase activation exhibiting peptide #129.
   to Y18933
                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                 Gene therapy; apolipoprotein A-I; agonist; dyslipidemic disorder; ApoA-I; cardiovascular disease; atherosclerosis; restenosis; LCAT; hyperlipidemia; septic shock; lecithin:cholesterol acyltransferase.
e.g. atherosclerotic streaks, and to raise antibodies. Y18680 trepresent lecithin:cholesterol acyltransferase (LCAT) activity exhibiting core peptides, which are apoA-I agonists.
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                                                                                                             Length 22;
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                                                                                                                                             3; Indels
                                                                                                               20;
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                                                                                                           Score 36; DB;
Pred. No. 12;
2; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Dasseux J,
                                                                                                                                                                                                                                                                                     Y18545 standard; Peptide; 22 AA.
                                                                                                          Query Match
Best Local Similarity 61.5%;
Matches 8; Conservative
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7 ndllrellealqk 19
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DASSEUX J.
DUFOURCQ J.
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                                                                Sequence
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(CORN/)
(DASS/) I
(DUFO/) I
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(SEKU/) (
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The present invention describes an agonist (A) of apolipoprotein A-I (apoA-I) which is a 15-29 residue peptide, or analog, that forms an amphipathic alpha-helix in presence of lipids. (A), and their lipid complexes, are used to treat or prevent diseases associated with dyslipidemia, specifically hypercholesterolaemia, cardiovascular disease, atherosclerosis, restenosis, HDL (high density lipoprotein) or apoA-I deficiency; hypertriglyceridemia and metabolic syndrome, also for treating septic shock. When labeled, (A) can also be used diagnostically to measure serum levels of HDL, in particular the HDL subpopulation that is involved in retrograde cholesterol transport, also to image HDL at tepresent lecithin:cholesterol acyltransferase (LCAT) activity exhibiting core peptides, which are apoA-I agonists.
                                                                                                                                                                                                 Apolipoprotein A-I; agonist; dyslipidemic disorder; dyslipidemia; human; lecithin:roblesterol acyltransferase; LGAT; hypercholesterolaemia; cardiovascular disease; atheroseclerosis; restenosis; HDL; apoA-I; high density lipoprotein; hypertriglyceridemia; metabolic syndrome;
                                                                                                                                                                      Lecithin:cholesterol acyltransferase activation exhibiting peptide #129.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Dasseux J,
                                                                                  Y19316 standard; Peptide; 22 AA.
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7 ndllrellealgk 19
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CORNUT I.
DASSEUX J.
DUFOURCO J.
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                                                                                                                                                                                                                                                                                          Synthetic
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(CORN/)
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(DUFO/)
(METZ/)
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                                                                                                               X19316;
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Length 22;

Score 36; DB 20; Pred. No. 12;

36.78; 61.58;

Best Local Similarity

22

Sequence

Query Match

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Cellular differentiation; physical insult; trauma; anoxia; AIDS; whyochtermia; pinal cord; kidney; heart; lung; liver; skin; HIV; whyochtermia; brain; spinal cord; kidney; heart; lung; liver; skin; HIV; wral disorder; hepatitis; retroviral; infection; encephalitis; FALS; neurodegenerative disorder; Parkinson's disease; Alzheimer's disease; muniquon's disease; carebollar degeneration; cardiovascular disease; familial amyotrophic lateral sclerosis; thermacions; macrition; heart disease; cardiomyopathy; hypertensive; myocardial; maintal amyotrophic lateral sclerosis; thermacions; mocardial; repertiasion injury; manue disease; rhermaciod arthritis; mocardial; systemic lupus erythematosus; insulin-dependent; diabetes mellitus; pernicious anaemia; dermatomyositis; enythema nodosum; myasthenia gravis; systemic lupus erythematosus; insulin-dependent; diabetes mellitus; pernicious anaemia; dermatomyositis; anti-phospholiphid syndrome; moplastic disorder; leukemia; sarcoma; myeloma; carcinoma; neuroma; melanoma; cancer; breast; colon; cervit; prostate; and colon; toxic insult; pulmonary; macular degeneration, cataract; mon-Hoddkin's lymphoma; disease; ulcerative collitis; motor neuron disease; we collitan Bare Syndrome; demyelinating disease; bypass surgery; chemotherapy; clozaplne; AZT; anthracycline.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Y25009-Y25019 are novel peptides derived from streptokinase that amellorate cell death. The products of the invention and their encoding nucleic acids may be useful for treating diseases and conditions related to aging, cellular differentiation, physical insult (e.g. physical trauma, anoxia, hyperthermia, hypothermia, chemically induced damage, and trauma to the brain, spinal cord, kidney, heart, lungs, liver, skin and any other organ), viral disorders (e.g. hepatitis, retroviral infections, viral encephalitis, and AIDS/HIV), neurodegenerative disorders (e.g. Parkinson's disease, Alzheimer's disease, Huntington's disease, cerebellar degenerations, and familial amyotrophic lateral sclerosis (FALS)), cardiovascular disease (e.g. atherosclerosis, myocardial infarction, heart failure, cardiomyopathy, myocardial reperfusion injury, and hypertensive heart disease), immune disease (e.g. rheumatoid
  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Peptides that ameliorate cell death useful for treating conditions associated with cellular differentiation
                                                                                                                                                                                                                                                                                                                   Streptokinase derived peptide 10 for amelioration of cell death.
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  Indels
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Mismatches
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                                                                                                                                                                                      Y25018 standard; peptide; 20 AA.
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96US-0759599.
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Conservative
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                                        8 SDLERRILEAKOK 20
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7 ndllrellealgk 19
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05-DEC-1996;
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Matches
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arthritis, systemic lupus erythematosus, insulin-dependent, diabetess mellitus, lupus, pernicious anaemia, dermatomyositis, enythema nodosum, Sjograen's syndrome, temporal arthritis, myasthenia gravis, Wegener's granulomatosis, glomerulomephitis, anti-phospholipid syndrome, and autoimmune polyarthritides), a neoplastic disorder (e.g. leukemia, sarcinomas, melanoma, cancers of the essarch, brain, colon, cervix, and prostate, Hodgkin's disease and non-Hodgkin's lymphoma), inflammatory disorders (e.g. inflammatory joint disorders and inflammatory induced cell damage to the eye, brain and cother organs), isohemia or reperfusion injury, renal isohemia, spinal cord ischemia and/or reperfusion injury, retinal ischemia, spinal cord ischemia and/or reperfusion cataract formation, and other noxic damage to other organs from chemicals, radiation, and other noxicus substances), macular degeneration, cataract formation, pancreatitis, Crohn's disease (e.g. motor neuron disease, degeneration of the spinal cord disease (e.g. motor neuron disease, bypass surgery, chemctherapy, chemctapy, chemcharapy, chemchally, accelerated aging, spinal cord, Guillan Bare Syndrome and demyelinating disease), bypass surgery, chemctherapy.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Apolipoprotein A-I; agonist, dyslipidemic disorder; dyslipidemia; human; lecithin:cholesterol acyltransferase; LCAT; hypercholesterolaemia; cardiovascular disease; atherosclerosis; restenosis; HDL; apoA-I; high density lipoprotein; hypertriglyceridemia; metabolic syndrome;
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                                                                                                                                                                                                                                                                                                                                                                                                                                    20; Length 20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 34; DB 2
Pred. No. 24;
2; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Y19063 standard; Peptide; 22 AA.
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70.08;
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Best Local Similarity 70.0
Matches 7; Conservative
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9 lerylleake 18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BUTINER K.
                                                                                                                                                                                                                                                                                                                                                                                    20 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28-SEP-1998;
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                                                                                                                                                                                                                                                                                                                                                                                      Sequence
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(METZ/)
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Y19063
ID Y19063
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Example; Page 114; 254pp; English.

The present invention describes an agonist (A) of apolipoprotein A-I applay which is a 14-22 residue peptide, or analog, that forms an amphipathic alpha-helix in presence of lipids. (A), and their lipid complexes, are used to treat or prevent diseases associated with dyslipidemia, specifically hypercholesterolaemia, cardiovascular disease. Apolipoprotein A-I; agonist; dyslipidemic disorder; dyslipidemia; human; lecithin:cholesterol acyltransferase; LCAT; hypercholesterolaemia; cardiovascular disease; atherosclerosis; restenosis; HDL; apoA-I; high density lipoprotein; hypertriglyceridemia; metabolic syndrome; septic shock. The present invention describes an agonist (A) of apolipoprotein A-I (apoA-I) which is a 15-29 residue peptide, or analog, that forms an amphipathic alpha-helix in presence of lipids. (A), and their lipid complexes, are used to treat or prevent diseases associated with dyslipidemia, specifically hypercholesterolaemia, cardiovascular disease, atteroscierosis, restenosis, HDL (high density lipoprotein) or apoA-I deficiency; hypertriglyceridemia and metabolic syndrome, also for treating septic shock. When labeled, (A) can also be used diagnostically to measure serum levels of HDL, in particular the HDL subpopulation that is involved in retrograde cholesterol transport, also to image HDL at e.g. atherosclerotic streaks, and to raise antibodies. Y18934 to Y19187 represent lecithin:cholesterol acyltransferase (LCAT) activity Lecithin:cholesterol acyltransferase activation exhibiting peptide #130. Gaps ij Length 22; Indels exhibiting core peptides, which are apoA-I agonists. Sekul Score 32.5; DB 20; Pred. No. 47; 2; Mismatches 2; Dasseux J, Metz G, Peptide agonists of apolipoprotein A-I Example; Page 111; 152pp; English. Y18809 standard; Peptide; 22 AA. 5; 33.2%; 64.3%; 98WO-US20328 97US-0940093 (first entry) Conservative 8 SDLERRILEA-KQK 20 Buttner K, Cornut I, WPI; 1999-277031/23 BUTTNER K. CORNUT I. DASSEUX J. Local Similarity les 9; Conserv METZ G. SEKUL R. 22 AA; Homo sapiens, 28-SEP-1998; 29-SEP-1997; 09-JUL-1999 WO9916408-A2 08-APR-1999 Synthetic. Sequence Query Match (DASS/) 1 (MET2/) 1 (SEKU/) (BUTI/) CORN/) X18809 Best Loc Matches 13 RESULT 718809 *6666666666666888 ò ద

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ä The present invention describes a nucleic acid (A) encoding an apolipoprotein A-I (apoA-I) agonist (B) that is a peptide, or analog, which forms an amphipathic alpha-helix in presence of lipids. (A), optionally as a complex with lipids, and host cells that contain (A), are useful for gene therapy, or prevention, of diseases associated with dyslipidemia, specifically hypercholesteroleamia, cardiovascular disease, atherosclerosis, restenosis, HDL (high density lipoprotein) and apoA-I deficiency, hypertriglyceridemia and metabolic syndrome, also to treat to study the role of apoA-I in lipid metabolism. (B) can also be used diagnostically, e.g. to measure serum HDL (particularly its atherosclerosis, restenosis, HDL (high density lipoprotein) or apoA-I deficiency; hypertriglyceridemia and metabolic syndrome, also for treating septic shock. When labeled, (A) can also be used diagnostically to measure serum levels of HDL, in particular the HDL subpopulation that is involved in retrograde cholesterol transport, also to image HDL at e.g. atherosclerotic streaks, and to raise antibodies. Y18680 to X18933 represent lecithin:cholesterol acyltransferase (LCAT) activity exhibiting core peptides, which are apoA-I agonists. Lecithin: cholesterol acyltransferase activation exhibiting peptide #130. Gaps Gene therapy; apolipoprotein A-I; agonist; dyslipidemic disorder; ApoA-I; cardiovascular disease; atherosclerosis; restenosis; LCAT; hyperlipidemia; septic shock; lecithin:cholesterol acyltransferase. ä Length 22; Nucleic acid encoding apolipoprotein A-I agonist peptides Indels . Ö DB 20; 5; Dasseux J, Dufourcq J, Score 32.5; DE Pred. No. 47; 2; Mismatches Claim 18; Page 166; 232pp; English. Ä Y18546 standard; Peptide; 22 33.2%; 64.3%; 98WO-US20329 97US-0940136 (first entry) Query Match 33.2 Best Local Similarity 64.3 Matches 9; Conservative 20 Buttner K, Cornut I, :|| | :||| ||| 7 ndllrellealkqk 8 SDLERRILEA-KQK CORNUT I.
DASSEUX J.
DUFOURCQ J. WPI; 1999-254921/21 BUTINER K. 22 AA; SEKUL R METZ G. 28-SEP-1998; 29-SEP-1997; Romo sapiens W09916409-A2 09-JUL-1999 08-APR-1999. Synthetic Sequence Sekul R; (CORN/) (DASS/) (DUFO/) (METZ/) (BUTT/) SEKU/) RESULT 14 718546 888888888888 ò g

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Gaps

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22;

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The pulmonary surfactant protein is generated by cleavage of a larger precursor protein synthesised by pulmonary type II epithelial cells and affects the surfactant like activity of phospholipids. The peptide shown is a c-terminal fragment (residues 63-78) which can be used for the treatment of pulmonary surfactant deficient diseases, including hyaline membrane disease, and/or abnormal states, including acute respiratory distress syndrome and can also be used for drug delivery systems.
                                                                                                                                                                                                                                                                                                        SP-B; surfactant; phospholipids; pulmonary type II epithelial cells; hyaline membrane disease; acute respiratory distress syndrome; pulmonary drug delivery.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Compan. having surfactant activity when admixed with phospholipid - comprising pulmonary surfactant protein fragments, used in formulations for respiratory distress syndrome treatment
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                                          Length
                                                                      Indels
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                                          DB 20;
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                                       Score 32.5; DE
Pred. No. 47;
2; Mismatches
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4; Mismatches
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                                                                                                                                                                                                                                                                                  Pulmonary surfactant protein fragment.
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P40558
ID P40558 standard; protein; 20 AA.
                                                                                                                                                                                                 R44062 standard; peptide; 16 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           32.7%;
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                              Ouery Match
Best Local Similarity 64.3
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                                                                                                8 SDLERRILEA-KOK 20
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7 ndllrellealkqk 20
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| grmlpglvarlvlra
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 22 AA;
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  Sequence
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                                                                                                                                                                                                                                                                                                                                                                Apolipoprotein A-I; agonist; dyslipidemic disorder; dyslipidemia; human; lecithin:roblesterol acyltransferase; LGMT; hypercholesterolaemia; cardiovascular disease; atheroseclerosis; restenosis; HDL; apoA-I; high density lipoprotein; hypertriglyceridemia; metabolic syndrome;
                                                                                                                                                                                                                                                                                                                                      Lecithin:cholesterol acyltransferase activation exhibiting peptide #130
subpopulation involved in retrograde cholesterol transport) and for imaging the circulatory system or HDL accumulations at fatty streaks. The present sequence represents a peptide from the present invention.
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                                                                                                  Length 22;
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                                                                                               Score 32.5; DI
Pred. No. 47;
2; Mismatches
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                                                                                                33.2%;
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DASSEUX J.
DUFOURCQ J.
                                                                                              Query Match
Best Local Similarity
Matches 9; Conserv
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Sekul R;
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(DASS/)
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Sarin VK;

P40558;

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Apolipoprotein A-I; agonist; dyslipidemic disorder; dyslipidemia; human; lecithin:cholesterol acyltransferase; LCAT; hypercholesterolaemia; cardiovascular disease; atherosclerosis; restenosis; HDL; apoA-I; high density lipoprotein; hypertriglyceridemia; metabolic syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lecithin:cholesterol acyltransferase activation exhibiting peptide #40.
                                                                                                                                                                                      The pulmonary surfactant protein is generated by cleavage of a larger precursor protein synthesised by pulmonary type II epithelial cells and affects the surfactant like activity of phospholipids. The peptide shown is a clerent integrant (residues 58-78) which can be used for the treatment of pulmonary surfactant deficient diseases, including hyaline membrane disease, and/or abnormal states, including acute respiratory distress syndrome and can also be used for drug delivery systems.
                                                                                       Compsn. having surfactant activity when admixed with phospholipid - comprising pulmonary surfactant protein fragments, used in formulations for respiratory distress syndrome treatment
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54;
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                              Lundell EO,
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                              Dhaon MK,
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                                                                                                                                                           Claim 2; Page 29; 36pp; English
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                              Baxter CH,
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Best Local Similarity
Matches 6; Conserv
(ABBO ) ABBOTT LAB.
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                              Absolom DR,
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(DASS/) I
(METZ/) M
(SEKU/) S
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Y18973
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The monoclonal antibody is useful in the purification and isolation of human erythropoletin from plasma by affinity chromatography. It as also useful in immunosasays on human body fluids for erythropoletin determination, e.g. in the diagnosis of hypoxia etc. involving low or defective red blood cell prodn.
                                                                           Sequence from erythropoietin used to produce monoclonal antibodies from cell line ATCC HB 8209.
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                                                                                                                                                                                                                                                                                                                                                                                                                Monoclonal antibody from hybridoma ATCC HB 8209 – useful for
purificn. and assay of human erythropoietin
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Pred. No. 51;
1; Mismatches 1; Indels
                                                                                                                          Erythropoietin; hypoxia diagnosis; immunoassay
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pulmonary surfactant protein fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 11; Page 20; 25pp; English.
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ilarity 77.8%;
Conservative
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                                             (first entry)
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                                                                                                                                                                                                                                                                                                     (KIRI-) KIRIN-AMGEN INC.
(KIRI ) KIRIN-AMGEN INC.
                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1984-213422/34
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|2 lerylleak 20
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                                             09-JAN-1992
                                                                                                                                                                                                                        03-FEB-1984;
                                                                                                                                                                                                                                                       04-FEB-1983;
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                                                                                                                                                          WO8403152-A.
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Best Local 9
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R44058;

RESULT 18

R44058

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Gaps

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Indels

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Example; Page 138; 232pp; English.
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                                                                                                                                                                                                                                                             Y18456 standard; Peptide; 22 AA.
                                                                                                                                         32.7%;
53.8%;
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                                                                                                                                                                7; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORNUT 1.
DASSEUX J.
DUFOURCQ J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1999-254921/21
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                                                                                                                                                  Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                           Synthetic
                                                                                                           Sequence
                                                                                                                                          Query Match
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Matches
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                           (apoA-1) Which is a 15-29 residue peptide, or analog, that forms an amphipathic alpha-helix in presence of lipids. (A), and their lipid complexes, are used to treat or prevent diseases associated with dyslipidemia, specifically hypercholesterolaemia, cardiovascular disease, atherosclerosis, restenosis, HDL (high density lipoprotein) or apoA-1 treating septic shock. When labeled (A) can also be used diagnostically to measure serum levels of HDL, in particular the HDL subpopulation that is involved in retrograde cholesterol transport, also to image HDL egg. atherosclerotic streaks, and to raise antibodies. Y18934 to Y19187 represent lecithin:cholesterol acyltransferase (LCAT) activity
                                                                                                                                                                                                                                                                                                                                                                                                             Apolipoprotein A-I; agonist; dyslipidemic disorder; dyslipidemia; human: lectithin:rohlesterol acyltransferase; LGAT; hypercholesterolaemia; cardicovascular disease; atherosclerosis; restenosis; HDL; apoA-I; high, density lipoprotein; hypertriglyceridemia; metabolic syndrome;
                                                                                                                                                                                                                                                                                                                                                                                       Lecithin:cholesterol acyltransferase activation exhibiting peptide #40.
                                                                                                                                                                                                                              Gaps
                   present invention describes an agonist (A) of apolipoprotein A-I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention describes an agonist (A) of apolipoprotein A-I (apoA-I) which is a 14-22 residue peptide, or analog, that forms an amphipathic alpha-helix in presence of lipids. (A), and their lipid complexes, are used to treat or prevent diseases associated with
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                                                                                                                                                                                                        DB 20; Length 22;
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                                                                                                                                                   exhibiting core peptides, which are apoA-I agonists.
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                                                                                                                                                                                                                            3,
                                                                                                                                                                                                      Score 32; DB :
Pred. No. 57;
3; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Peptide agonists of apolipoprotein A-I
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Example; Page 109; 254pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Dasseux J,
                                                                                                                                                                                                                                                                                                                         Y18719 standard; Peptide; 22 AA.
                                                                                                                                                                                                    32.78;
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Best Local Similarity 53.8
Matches 7; Conservative
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7 nellrellealgk 19
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DASSEUX J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BUTTNER K.
                                                                                                                                                                        22 AA;
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                                                                                                                                                                                                                                                                                                                                                                   09-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                         septic shock
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                                                                                                                                                                         Sequence
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(SEKU/)
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                                                                                                                                                                                                                                                                                                                                              X18719;
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dyslipidemia, specifically hypercholesterolaemia, cardiovascular disease, atherosclerosis, restenosis, HDL (high density lipoprotein) or apoA-I deficiency; hypertriglyceridemia and metabolic syndrome, also for treating septic shock. When labeled, (A) can also be used diagnostically to measure serum levels of HDL, in particular the HDL subpopulation that is involved in retrograde cholesterol transport, also to image HDL at the recognition that is involved in retrograde cholesterol and to raise antibodies. Y18680 to Y18933 represent lecithin:cholesterol acyltransferase (LCAT) activity exhibiting core peptides, which are apoA-I agonists.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   apolipoprotein A-I (apoA-I) agonist (B) that is a peptide, or analog, which forms an amphipathic alpha-helix in presence of lipids. (A), or orthonorial sa a complex with lipids, and host centals that contain (A), are useful for gene therapy, or prevention, of diseases associated with dyslipidemia, specifically hypercholesterolaemia, cardiovascular disease, atheroscierosis, restenosis, HDL (high density lipoprotein) and apoA-I deficiency, hypertriglyceridemia and metabolic syndrome, also to treat endotoxemia (septic shock). Host cells containing (A) can also be used to study the role of apoA-I in lipid metabolism. (B) can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Lecithin: cholesterol acyltransferase activation exhibiting peptide #40.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 32; DB 20; Length 22;
Pred. No. 57;
3; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nucleic acid encoding apolipoprotein A-I agonist peptides
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22 AA;

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Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Apolipoprotein A-I; agonist; dyslipidemic disorder; dyslipidemia; human; lecithin:roblesterol acyltransferaes; LCAT; hypercholesterolaemia; cardiovascular disease; atheroscleroslis; restenosis; HDL; apoA-I; high density lipoprotein; hypertriglyceridemia; metabolic syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lecithin: cholesterol acyltransferase activation exhibiting peptide #40
diagnostically, e.g. to measure serum HDL (particularly its subpopulation involved in retrograde cholesterol transport) and for imaging the circulatory system or HDL accumulations at fatty streaks. The present sequence represents a peptide from the present invention.
                                                                                                                                                                                                            Gaps
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                                                                                                                                                                Length 22;
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                                                                                                                                                            Score 32; DB 20;
Pred. No. 57;
                                                                                                                                                                                                         3; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                           Y19227 standard; Peptide; 22 AA.
                                                                                                                                                              32.7%;
53.8%;
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Best Local Similarity 53.0.
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7 nellrellealqk 19
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Sekul R;
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DASSEUX J.
DUFOURCQ J.
METZ G.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   septic shock
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                                                                                                      Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                       X19227;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention describes an agonist (A) of apolipoprotein A-I (apoA-I) which is a 15-29 residue peptide, or analog, that forms an amphipathic alpha-helix in presence of lipids. (A), and their lipid complexes, are used to treat or prevent diseases associated with dyslipidemia, specifically hypercholesterolaemia, cardiovascular disease, atherosclerosis, restenosis, HDL (high density lipoprotein) or apoA-I deficiency; hypertriglyceridemia and metabolic syndrome, also for treating septic shock. When labeled, (A) can also be used diagnostically to measure serum levels of HDL, in particular the HDL subpopulation that is involved in retrograde cholesterol transport, also to image HDL at e.g. atherosclerotic streaks, and to raise antibodies. Y18934 to Y19187 represent lecithin:cholesterol acyltransferase (LCAT) activity exhibiting core peptides, which are apoA-I agonists.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lecithin:cholesterol acyltransferase activation exhibiting peptide #256.
                                                       Gaps
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Length 22;
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  DB 20;
Score 32; DB 2
Pred. No. 57;
3; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example; Page 121; 254pp; English.
                                                                                                                                                                                                                                                                                           Y19185 standard; Peptide; 16 AA.
32.7%;
53.8%;
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Query Match 32.7
Best Local Similarity 53.8
Matches 7; Conservative
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7 nellrellealqk 19
                                                                                                        8 SDLERRILEAKOK 20
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DASSEUX J.
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(DASS/)
(METZ/)
                                                                                                                                                                                                                                                                                                                                               Y19185;
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Score 31.5; DB 20; Length 16; Pred. No. 49;

32.1%; 69.2%;

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Y18672 standard; Peptide; 16 AA.
                                                                                                                                                                                                                                                                                                     (METZ/) METZ G.
(SEKU/) SEKUL R.
                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                           29-SEP-1997;
                                                                                                                                                                               W09916409-A2
                                                                                                                                                                                                                       28-SEP-1998;
                                                                   09-JUL-1999
                                                                                                                                                                                                   08-APR-1999.
                                                                                                                                                  Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                              Sekul R;
                                                                                                                                                                                                                                                               (BUTT/)
                                                                                                                                                                                                                                                                                  (DASS/)
                                                X18672;
        RESULT
Y18672
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ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention describes an agonist (A) of apolipoprotein A-I (apoA-I) which is a 14-22 residue peptide, or analog, that forms an amphipathic alpha-helix in presence of lipids. (A), and their lipid complexes, are used to treat or prevent diseases associated with dyslipidemia, specifically hypercholesterolaemia, cardiovascular disease, atheroscierosis, restenosis, HDL (high density lipoprotein) or apoA-I deficiency; hypertriglyceridemia and metabolic syndrom, also for treating septic shock. When labeled, (A) can also be used disgnostically to measure serum levels of HDL, in particular the HDL subpopulation that is involved in retrograde cholesterol transport, also to image HDL at e.g. atherosclerotic streaks, and to raise antibodies. X18680 to X18933 represent lecithin:cholesterol acyltransferase (LCAT) activity exhibiting core peptides, which are apoA-I agonists.
                                                                                                                                                                    Apolipoprotein A-I; agonist; dyslipidemic disorder; dyslipidemia; human: lecitihin:cholesterol acyltransferase; LCAT; hypercholesterolaemia; cardiovascular disease; atherosclerosis; restenosis; HDL; apoA-I; high density lipoprotein; hypertriglyceridemia; metabolic syndrome;
                                                                                                                                                 Lecithin: cholesterol acyltransferase activation exhibiting peptide #256.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              32.1%; Score 31.5; DB 20;
ilarity 69.2%; Pred. No. 49;
Conservative 1; Mismatches 2;
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Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                               Peptide agonists of apolipoprotein A-I
                                                                                                                                                                                                                                                                                                                                                                                                        Dasseux J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example; Page 118; 152pp; English.
                                                                                       Y18931 standard; Peptide; 16 AA
ä
                                                                                                                                                                                                                                                                                                                         97US-0940093.
                                                                                                                                                                                                                                                                                                      98WO-US20328
                                                                                                                              (first entry)
Conservative
                               4 dlfrellealkgk 16
                 9 DLERRILEA-KQK 20
                                                                                                                                                                                                                                                                                                                                                                                                        Cornut I,
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                                                                                                                                                                                                                                                                                                                                                      CORNUT I.
DASSEUX J.
METZ G.
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Best Local Similarity
Matches 9; Conserv
                                                                                                                                                                                                                                                                                                                                             BUTTNER K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16 AA;
                                                                                                                                                                                                                                                                                                                                                                                    SEKUL R.
                                                                                                                                                                                                                                Synthetic.
Homo sapiens.
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                                                                                                                                                                                                                                                                                                                        29-SEP-1997;
                                                                                                                                                                                                            septic shock
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                                                              Lecithin:cholesterol acyltransferase activation exhibiting peptide #256.
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                                                                                                               Gene therapy; apolipoprotein A-I; agonist; dyslipidemic disorder; ApoA-I; cardiovascular disease; atherosclerosis; restenosis; LCAI; hyperlipidemia; septic shock; lecithin:cholesterol acyltransferase.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nucleic acid encoding apolipoprotein A-I agonist peptides
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dufourcd J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 31.5; Di
Pred. No. 49;
1; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example; Page 202; 232pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Dasseux J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  32.1%;
69.2%;
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(first entry)
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Best Local Similarity
Matches 9; Conserv
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GenCore version 4.5
Copyright (c) 1993 - 2000 Compugen Ltd.
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OM protein - protein search, using sw model
Run on: February 5, 2001, 11:27:23 ; Search time 265.72 Seconds
(without alignments)
8.822 Million cell updates/sec
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Scoring table: BLOSUM62	Sequence: 1 ERG	-SD
KAS	ERGKMIPSDLERRILEAKQK 20)9-343-406-3

Total number	Searched:	
Total number of hits satisfying chosen parameters:	374700 seqs, 117207915 residues	Gapop IU.U , Gapext U.S
6627		

										Database :
sp_verte	ds ds	10: sp_plant:*	sp_c	7: sp_mhc:*	6: sp_mammal:*	5: sp_invertebrate:*	: sp_hun	3: sp_fungi:*	 1: sp_archea:*	SPTREMBL_15:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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24.5	25	25	25	25	25	25	26	26	26	26	26	27	27	27	27.5	28	28	33	Score
25.0	25.5	25.5	25.5	25.5	25.5	25.5	26.5	26.5	26.5	26.5	26.5	27.6	27.6	27.6	28.1	28.6	28.6	33.7	Query Match Length
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σ	σ	N	12	4	Ŋ	σ	2	N			11	1	U	۲	σ	G	10	4	BG
Q9TRU5	Q26362	Q9R573	Q87583	Q9UCQ2	Q56610	Q9TRP0	Q9R4W5	Q9R5F4	Q9UCN1	Q46093	P97330	Q26667	Q24619	Q9UWH3	Q9TTG0	Q9U542	Q9SMC7	Q9P0M3	Ib
Q9tru5	Q26362	Q9r573	Q8 7	Q9uc	Q56610	Q9tr	Q9r4	Q9r5f4	Q9ucn1	Q46093	P97	Q26	Q24619	Q9uwh3	Q9tt	Q9u542	Q9smc7	Q9p0m3	Desc
u5 oryctolagus	862 eleutheria	73 nitrosomona)87583 chimpanzee	ucq2 homo sapien	10 vibrio chol	p0 sus scrofa	w5 helicobacte		n1 homo sapien		P97330 mus musculu	26667 mus musculu	19 drosophila	h3 thermococcu	g0 ateles belz	42 aedes aegyp	mc7 lycopersico	m3 homo sapien	Description

45	44	43	42	41	40	39	38	37	36	ა 5	34	ω ω	32	31	30	29	28	27	26	25	24	23	22	21	20
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Q9KJQ9	Q9KJR0	Q9KJR2	Q9KJR3	Q9KJR4	Q9KJR5	Q9KJR6	Q9KJR7	Q9KJR8	Q9KJR9	Q9KJSO	Q9KJS1	Q9KJS2	Q9KJS3	Q9KJS4	Q9KJS5	Q9KJS6	Q9KJS7	Q9KJS8	Q9KJS9	Q9KJT0	Q9KJT1	Q9KJT2	Q87587	Q63039	Q9UD21
	Q9kjr0 mycoplasma				Q9kjr5 mycoplasma	5		83		js0		Q9kjs2 mycoplasma		s4	Q9kjs5 mycoplasma		7			Q9kjt0 mycoplasma		Q9kjt2 mycoplasma	7	Q63039 rattus norv	Q9ud21 homo sapien

ALIGNMENTS

OCCUPATION	RES 1D RES	Db Qy	z mo	DR FT SQ	RR RR RR	8888	B D D D D A	RES Q9F
Ol-MAY-2000 (TrEMBLrel. 13, Created) Ol-MAY-2000 (TrEMBLrel. 13, Last sequence update) Ol-MAY-2000 (TrEMBLrel. 13, Last sequence update) Ol-MAY-2000 (TrEMBLrel. 13, Last annotation update) PUTATIVE PROLINE-RICH PROTEIN (FRAGMENT). CTD5. Lycopersicon esculentum (Tomato). Eukaryota; Viridiplantae; Embryophyta; Tracheophyta; Spermatophyta;	RESULT 2 Q9SMC7 PRELIMINARY; PRT; 17 AA.	7 PSDLERRILEAKOK 20 	Query Match 33.7%; Score 33; DB 4; Length 18; Best Local Similarity 50.0%; Pred. No. 2.1e+02; Matches 7; Conservative 2; Mismatches 5; Indels 0; Gaps	EMBL; AF152839; AAF73199.1; NON_TER 18 18 SEQUENCE 18 AA; 2025 MW; A1F292BC77872D67 CRC64;	A. Miller M., M. ocalization 999) to the		Q9POM3; 01-OCT-2000 (TrEMBLrel. 15, Created) 01-OCT-2000 (TrEMBLrel. 15, Last sequence update) 01-OCT-2000 (TrEMBLrel. 15, Last annotation update) 01-OCT-2000 (TrEMBLrel. 15, Last annotation update) POLYMYOSITIS/SCLERODERMA AUTOANTIGEN 2 (FRAGMENT).	RESULT 1 Q9POM3 PRELIMINARY; PRT; 18 AA.

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SEQUENCE FROM N.A.

Orzaez D.V., Van de Control of the EMBL/Geniews of the EMBL/Geniew
                                                                                                                                                                                                                                             Q9TTG0 PRELIMINARY; PRT; 25 AA.
Q9TTG0;
Q9TTG0;
01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-CCT-2000 (TrEMBLrel. 15, Last annotation update)
ALPHA-CARDIAC ACTIN (FRAGMENT).
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EMBL; AF107695; AAF20013.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
11STONE (FRAGMENT).
Acedes aegypti (Yellowfever mosquito).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea;
Culicidae; Aedes.
                                                                                                                              Eukaryota; Metazoa;
Mammalia; Eutheria;
                            SEQUENCE FROM N.A.
                                                                                                 NCBI_TaxID=118643;
                                                                                                                                                                                                         Ateles belzebuth chamek.
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Solanales; Sola
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5; Conserv
F.C.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24 AA;
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Primates;
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Pred. No. 1.1e
1; Mismatches
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Pred. No. 1.5e+03;
4; Mismatches 3
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1.1e+03;
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01-NOV-1996
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                                                                                                                                                                                                                                                                                   Eukaryota; Me
Pterygota; Ne
Ephydroidea;
SEQUENCE FROM N.A.

MEDLINE-89357452; PubMed=2475389;

Garbe J.C., Bendena W.G., Pardue M.L.;

"Sequence evolution of the Drosophila heat
The nonrepeated portion of the gene.";

Genetics 122:403-415(1989).
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Q9UWH3;
01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
KETO-VALINE-FERREDOXIN OXIDOREDUCTASE BETA-SUBUNIT,
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Heider J., Mai X., Adams M.W.;
"Characterization of 2-Ketoisovalerate ferredoxin oxidoreductase,
new and reversible coenzyme A-dependent enzyme involved in peptid
fermentation by hyperthermophilic archaea.";
J. Bacteriol. 178:780-787(1996).
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01-NOV-1996 (TrEMBLrel.
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HSR-OMEGA DNA ENCODING F
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Submitted (OCT-1998) to the EMBL/GenBank/DDBJ databases.
EMBL; AF099178; AAF21852.1; -.
HSSP; P02568; 1ARN.
INTERPRO; IPR000279; -.
PFAM; PF00022; actin; 1.
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8; Conservative
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Neoptera; Endopterygota; Diptera; Brachyce
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Pred. No. 1.9e
4; Mismatches
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SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

MEDLINE-97124850; PubMed-8954783;

Bruyns E., Mincheva A., Bruyns R.M., K.

Lichter P., Meuer S., Schraven B.;

"Sequence, genomic organization, and clause could be a companization organization organization, and clause could be a companization organization, and clause could be a companization organization.

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MEDLINE-92073357; PubMed-1720547;

MURTHA M.T., Leckman J.F., Ruddle F.H.;

Pletection of homeobox genes in development and evo

Proc. Natl. Acad. Sci. U.S.A. 88:10711-10718(1991).

EMBL; M81666; AAA63528.1; -.

INTERPRO; IPR001356; -.
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
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ELYBASE; FBgn0012703; Dpse\Hsr-omega.
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01-MAY-1997 (TrEMBLrel. 03, L:
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PROTEIN TYROSINE PHOSPHATOSE,
PROTEIN (CD45-AP) (LSM-1).
                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa;
Mammalia; Eutheria;
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Pred. No.
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Matches 6; Conserv
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O9UCN1;
O1-MAY-2000 (TIEMBLIEL 1
01-MAY-2000 (TIEMBLIEL 1
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            SEQUENCE.
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SECUENCE R.M., Urban R.G., Lane W.S., Gorga J.C., St. Chicz R.M., Urban R.G., Lane W.S., Gorga J.C., St. Yignall D.A., Strominger J.L.;
"predominant naturally processed peptides bound t from MHC-related molecules and are heterogeneous Nature 358.764-768(1992).
INTERPRO; IPR001757;
INTERPRO; IPR001757;
CR
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Q46093;
01-NOV-1996;
01-NOV-1996;
01-NOV-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hypothetical protein.
NON_TER 1
SEQUENCE 17 AA; 19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Campylobacter jejuni.
Bacteria; Proteobacteria; epsilon subdivision; Campylobacter
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PFAM; PF00122;
SEQUENCE 18 /
                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa;
Mammalia; Eutheria;
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STRAIN-81-176;
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NCBI_TaxID=197;
                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                            (NA+ + K+)ATPASE.
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; E1-E2
AA; 18
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E2_ATPase;
1886 MW;
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                                                                                                                                                                                                                                                                                                                                                         Chordata;
Primates;
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Last sequence update)
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Pred. No. 1.3e
2; Mismatches
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Pred. No.
   7F951335A9FA9070 CRC64;
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Catarrhini; Hominidae; Homo
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1.3e+03;
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Best Local
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Q9R4W5;
01-MAY-2000 (TTEMBLrel. 13, Created)
01-MAY-2000 (TTEMBLrel. 13, Last sequence update)
01-JUN-2000 (TTEMBLrel. 14, Last annotation update)
30 KDA MAJOR HEAT SHOCK PROTEIN (FRAGMENT)
Helicobacter pylori (Campylobacter pylori).
Bacteria; Proteobacteria; epsilon subdivision; Helicobacter group;
                                                                                                                                                                                                                                                                  MEDLINE-95020803; PubMed-7935068; Yokota K., Harai Y., Haque M., Hayashi S., Is Nagamachi E., Tsukada Y., Fujii N., Oguma K.; "Heat shock protein produced by Helicobacter Microbiol. Immunol. 38:403-405(1994).

INTERPRO; IPR002026; -. IPR002026; -. PFAM; PF00547; urease_gamma; 1.

SEQUENCE 20 AA; 2302 MW; 29C9DFBFD6D21805
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Turbett G.R., Hoj P.B., Horne R., Mee B.J.;
"Purification and characterization of the ureas:
Helicobacter species from humans and animals.";
Infect. Immun. 60:5259-5266(1992).
INTERPRO; IPR002026; -.
PFAM; PF00547; urease_gamma; 1.
SEQUENCE 20 AA; 2275 MW; 29C9DEID46D21435 C:
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
UREASE SMALL SUBUNIT (FRACMENT).
Helicobacter mustelae.
Bacteria; Proteobacteria; epsilon subdivision; Helicobacter group;
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Q9R5F4
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                                                                                                        Similarity 4; Conserv
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4; Conserv
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SEQUENCE
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MEDLINE-97074686; PubMed-8917113;
Franco A., Peir-En Y., Johnson J.,
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EMBL; U30472; AAC44579.1; -.
NON_TER 18 18
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Bacteria; Proteobacteria;
NCBI_TaxID=666;
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Q9TRPO;
Q9TRPO;
Q1-MAY-2000 (TrEMBLrel. 13, Created)
Q1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
Q1-JUN-2000 (TrEMBLrel. 14, Last annotation update)
LOW MR ZONA PELLUCIDA BINDING PROTEIN (FRAGMENT).
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae;
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Q9R573;
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01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
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KU ANTIGEN 73 KDA PROTEIN FRACTION 9.
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Bibollet-Ruche F., Brengues C., Galat-Luong A., Galat
Vidal N., Veas F., Durand J.P., Cuny G.;
"Genetic diversity of simian immunodeficiency viruses
African green monkeys: evidence of multiple genotypes
populations from the same geographical locale.";
J. Virol. 71:307-313(1997).
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
  01-MAY-2000
01-MAY-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          369C9737383F87B9 CRC64;
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Best Local S
Matches 4
                                                                            OPTRU5
PRELIMING.,

OPTRU5
11-MAY-2000 (TIEMBLIEL. 13, Created)
01-MAY-2000 (TIEMBLIEL. 13, Last sequence update)
01-MAY-2000 (TIEMBLIEL. 15, Last annotation update)
01-OCT-2000 (TIEMBLIEL. 15, DOMAIN).
PACTOR IX LIGHT CHANI (GLA DOMAIN).
Oryotolagus cuniculus (Rabbit).
Oryotolagus cuniculus (Rabbit).
Oryotolagus cuniculus (Rabbit).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-NOV-1996 (TrEMBLrel. 01, 01-NOV-1996 (TrEMBLrel. 01, 01-MAY-1999 (TrEMBLrel. 10, ANTE CLASS HOMEOBOX CNOX-1 Eleutheria dichotoma.
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Q26362;
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J. Biol. Chem. 268:14645-14654(1993).
HSSP; Q50925; 1FGJ.
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J. Exp. 2001. 260:413-416(1991).
EMBL; S70691; AAB20572.1; -.
Homeobox; DNA-binding; Nuclear protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eleutheriidae; Eleutheria.
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Schierwater B., Murtha M.,
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                                                             NCBI_TaxID=9986;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11 ERRILEAKO 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16 DRGKATPKE 24
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3051 MW;
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1; Mismatches
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Pred. No.
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4.1e+03;
                                                                                                                                  Vertebrata; Euteleostomi;
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Q9UD21;
01-MAY-2000 (TrEMBLrel. 13, C
01-MAY-2000 (TrEMBLrel. 13, L
01-JUN-2000 (TrEMBLrel. 14, L
CYCLIN E-L (FRAGMENT).
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
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Thromb. Res. 64:57-68(1991).
HSSP; P00740; 1CFH.
SEQUENCE 20 AA; 2317 MW;
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      NON_TER
                                                                                                                                                                                                                                                                                                           Rattus norvegicus (Rat).
Eukaryota; Metazoa; Choro
Mammaila; Eutheria; Roder
MCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mol. Cell
SEQUENCE
                                                                                    MEDLINE-88209084; PubMed-3284529;
Harper K., Jones D.E. Jr., Brennan M.D., Lindahl R.;
"Characterization of a functional recombinant rat 11
dehydrogenase: expression as a non-fusion protein in
Biochem. Biophys. Res. Commun. 152:940-947(1988).
                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
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16 AA;
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Rodentia;
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4; Mismatches
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      7FFA5DC981665D83 CRC64;
                                                                                                                                                                                                                                                                                                                                              Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Rat
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FRUCTOSE BIPHOSPHATE ALDOLASE ()
Mycoplasma mycoides mycoides LC
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"Genetic diversity of simian immunodeficiency viruses African green monkeys: evidence of multiple genotypes populations from the same geographical locale.";
J. Virol. 71:307-313(1997).
EMBL U37203; ACC56141.1; -.
INTERPRO; IPRO00625; -.
IPRO1024; REV; 1.
                                      Thiaucourt F., Lorenzon S., David A., "Phylogeny of the Mycoplasma mycoides of a putative membrane protein gene." vet. Microbiol. 72:251-268 (2000). EMBL; AF162939; AAF26225.1; -.
                                                                                                                                                                                                                                             Bacteria; Firmicutes; Entomoplasmataceae.
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MEDLINE-97138325; PubMed-8985351;
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Query Match

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Score

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Matches 4; Conserv
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Thiaucourt F., Lorenzon S., David A., Brenzon S.,                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-OCT-2000 (TrEMBLrel. 15, Created)
01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
01-OCT-2000 (TrEMBLrel. 15, Last annotation update)
FRUCTOSE BIPHOSPHATE ALDOLASE (FRAGMENT).
Mycoplasma mycoides mycoides LC.
Bacteria; Firmicutes; Bacillus/Clostridium group; Mollicutes;
Entomoplasmataceae.
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01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
01-OCT-2000 (TrEMBLrel. 15, Last annotation update)
FRUCTOSE BIPHOSPHATE ALDOLASE (FRAGMENT).
Mycoplasma mycoides mycoides LC.
Bacteria; Firmicutes; Bacillus/Clostridium group; Mollicutes;
Entomoplasmataceae.
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Thiaucourt F., Lorenzon S., David A., Breard A.;
"Phylogeny of the Mycoplasma mycoides cluster as
of a putative membrane protein gene.";
vet. Microbiol. 72:251-268(2000).
EMBL; AF162940; AAF26226.1; -.
NON_TER 20
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01-0CT-2000
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Pred. No. 4.8e+03;
5; Mismatches 5;
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VG22_BPT6
AMAA_BACTR
RL41_AGABI
ACPH_RABIT
YMTP_XANCP
UR15_HORVU
RS13_HORVU
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THD2_SALTY
T2A_PARTE
T2B_PARTE
T2B_PARTE
CAT2_FASHE
PPBL_PSEAE
RL6_VIBPR
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AMP_FUSNU
PEDB_HYDAT
RL41_YEAST
ULAK_MOUSE
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                                                              4 theromyzon
3 litoria cae
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SULT 2 XB_THUOB COXB_THUOB P80974; O1-NOV-1997 (Rel O1-NOV-1997 (Rel 15-JUL-1999 (Rel CYTOCHROME C OXI Thunnus obesus of Eukaryota; Metaz Actinopterygii; Acanthomorpha; Scombridae; Thur [1]	Qy 8 SDLERRILEA 17 : : : Db 1 SDIEQRIKQA 10	Query Match Best Local Similarity 60.0%; Pred. No. 1.1e+02; Matches 6; Conservative 3; Mismatches 1 8 SDLERRILEA 17	(Rel. 35, Last annotation updat (Rel. 35, Last annotation) (Rel. 35, Last annotation)	SULT 1 P_ACICA STANDARD; PRT; 25 P80918; 01-NOV-1997 (Rel. 35, Created) 01-NOV-1997 (Rel. 35, Last sequence updat	ALIGNMENTS	34 19 19.4 13 1 UP51_UPEIN 35 19 19.4 19 1 FIBB_VULVU 36 19 19.4 23 1 NIFD_ANASL 37 19 19.4 24 1 LEC_CROST 38 19 19.4 24 1 RS5_VILPR 39 19 19.4 24 1 VOC_METTM 40 19 19.4 25 1 RL41_OUESU 41 18.5 18.9 23 1 COXK_CANFA 42 18 18.4 10 1 URE3_MORMO 43 18 18.4 10 1 URE3_MORMO 44 18 18.4 11 1 URE3_MORMO 44 18 18.4 11 DCMM_PSECA
		DB 1; 1.1e+02 hes	a subdivision; Moraxellaceae; a subdivision; Moraxellaceae; dy E.P.; dy E.P.; dy E.P.; for carrier protein important for de biosynthesis."; 97). THE CARRIER OF THE GROWING FATTY ACID THESIS. DE NOVO FATTY ACID BIOSYNTHESIS. DE CHAINS ARE COVALENTLY BOUND TO THE THETIC GROUP. THETIC GROUP. THEINE; PARTIAL. hopantetheine. 8F186AC1C7A3907 CRC64;	25 A	ALIGNMENTS	LUPEIN P82036 uperoleia i P14482 vulpes vulp B_VULVU P14482 vulpes vulp D_ANASL P33177 anabaena sp P16351 crotalaria P52856 vibrio prot C_METTM P60809 methanobact 1_QUESU Q91728 canis famil Q91728 canis famil Q91728 canis famil DHUMAN P01358 homo sapien B_T17339 morganelia M_THEAC Q05213 thermoplasm P19920 pseudomonas

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RESULT :
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Q06728;
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SEQUENCE
                                                                                        This SWISS-PROT entry is copyright. It is produced through a cobetween the Swiss Institute of Bioinformatics and the EMBL the European Bioinformatics Institute. There are no restrict use by non-profit institutions as long as its content is modified and this statement is not removed. Usage by and for entities requires a license agreement (See http://www.lsb-slb.or send an email to license@isb-slb.ch).
                                                        PIR;
                                                                                                                                                                                     Nucleic Acids Res. 21:1500-1500(1993).

-I- FUNCTION: IMPORTANT IN GENETIC RECOMBINATION, DNA REPAIR, AN REPLICATION. POSSESSES PAIRING AND STRAND-TRANSFER ACTIVITY. INTERACTS WITH DDA AND GENE 32 PROTEINS.
-I- SIMILARITY: BELONGS TO THE RECA-LIKE PROTEINS FAMILY.
                             ATP-binding.
                                                                  EMBL; X68725; CAA48668.1;
                                                                                                                                                                                                                                                                   "Cloning and sequencing of the genes of beta-glucosyl-HMC-alpha-glucosyl-transferases
                                                                                                                                                                                                                                                                                                                                                                     Bacteriophage T6
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TISSUE-HEART, AND LIVER;

MEDLINE-97454291; PubMed-9310366;
                                                                                                                                                                                                                                                                                                                                                         Viruses;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Arnold S., I
Kadenbach B.
                                                                                                                                                                                                                                                                                          Winkler M., Rueger W.;
                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
MEDLINE-93219141; PubMed-8464751;
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                  TER
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CATALYTIC ACTIVITY: 4 FERROCYTOCHROME C + O(2) = 2 H(2)O + 4 FERRICYTOCHROME C.
                                        ; S35627; S35627. damage; DNA replication;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SUBCELLULAR LOCATION: MITOCHONDRIAL INNER MEMBRANE SIMILARITY: BELONGS TO THE CYTOCHROME C OXIDASE VB
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8; Conservative
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       16
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(Rel. 29, Last sequence update)
(Rel. 35, Last annotation updat
ON AND REPAIR PROTEIN (FRAGMENT)
16
AA;
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                                                                                                                                                                                                                                                                                                                                                         viruses,
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Pred. No.
                                          DNA recombination;
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UVSX_BPT2
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Q06727;
Q10-JUN-1994 (Rel. 2
01-JUN-1994 (Rel. 2
01-NOV-1997 (Rel. 3
                                                                                                                                            THD2_SALTY
P11954;
01-OCT-1989
01-OCT-1989
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THRECNINE DE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               the European Bioinformatics Institute. There are no restrict use by non-profit institutions as long as its content is modified and this statement is not removed. Usage by and fo entities requires a license agreement (See http://www.isb-sib.or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Cloning and sequencing of the genes of beta-glucosyl-HMC-alpha-glucosyl-transferases and T6.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bacteriophage T2.
Viruses; dsDNA viruses,
T4-like phages.
                                                              Bacteria;
                                                                                  Salmonella
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -1- FUNCTION: IMPORTANT IN GENETIC RECOMBINATION, DNA REPAIR, AN REPLICATION: POSSESSES PAIRING AND STRAND-TRANSFER ACTIVITY.

INTERACTS WITH DDA AND GENE 32 PROTEINS.

-1- SIMILARITY: BELONGS TO THE RECA-LIKE PROTEINS FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nucleic Acids Res. 21:1500-1500(1993).
-!- FUNCTION: IMPORTANT IN GENETIC RECOMBINATION, DNA REPAIR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OVSX.
SEQUENCE
                                     Salmonella
                                                                                                          IDCB.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA damage; DNA replication;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Winkler M., Rueger W.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE-93219141; PubMed-8464751;
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4; Conservative
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E DEHYDRATASE CATABOLIC
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REPAIR PROTEIN (FRAGMENT)
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5; Micmo
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                                                            subdivision;
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RESULT 6
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Matches 5
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027173;
15-JUL-1999 (Rel. 38, Created)
15-JUL-1999 (Rel. 38, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
TRICHOCYST MATRIX PROTEIN T2-A (SECRETORY GRANULE PROTEIN T2-A)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Madeddu L., Gautier M.-C., Vayssie L., Houari A., Spe
"A large multigene family codes for the polypeptides
crystalline trichocyst matrix in Paramecium.";
Mol. Biol. Cell 6:649-659(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PIR; B23317; B22317.

STYGENE; SG10390; TDCB.

INTERPRO; IPR000634; -.

PROSITE; PS00165; DEHYDRATASE_SER_THR;

PROSITE; PS00165; DEHYDRATASE_SER_THR;

LYASE; PYI1doxal phosphate; Allosteric
NON TEP 24
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-i- CATALYTIC ACTIVITY: L-THREONINE + H(2)O - 2-OXOBUTANOATE + NH(3)
                                                                                                                                                                                                                                                             Biochimie 76:329-335(1994).
                                                                                                                                                                                                                                                                                           Paramecium.";
                                                                                                                                                                                                                                                                                                                  Madeddu L., Gautier M.-C., le Caer J.P., Protein processing and morphogenesis of
                                                                                                                                                                                                                                                                                                                                                                           MEDLINE=95119139; PubMed=7819344;
                                                                                                                                                                                                                                                                                                                                                                                                                                PARTIAL SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE=96059477; PubMed=7579685;
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PATHWAY: THREONINE CATABOLISM.

SUBUNIT: HOMOTETRAMER.

SUMULARITY: TO THREONINE DEHYDRATASE BIOSYNTHETIC AND SERINE
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                                                                                  COMPLEX SECRETORY STORAGE GRANULES-DOCKED AT THE PLASMA MEMBRANE, READY TO RAPIDLY RESPOND TO AN EXOCYTOTIC STIMULUS. SIMILARITY: BELONGS TO THE TMP FAMILY.
                                                                                                                                                                        TRICHOCYST MATRIX.
SUBCELLULAR LOCATION: TRICHOCYST. THESE ARE ARCHITECTURALLY
                                                                                                                                                                                                                                FUNCTION: STRUCTURAL
  SWISS-PROT entry is copyright. It is produced through een the Swiss Institute of Bioinformatics and the EN
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                                                                                                                                                                                                                                   PROTEIN THAT CRYSTALLIZE INSIDE
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Pred. No. 8.4e
2; Mismatches
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           a collaboration
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RESULT 7
T2B_PART 1
D 72B_P
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Matches 7
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15-JUL-1999 (Rel. 3
15-JUL-1999 (Rel. 3
TRICHOCYST MATRIX F
  Polyprotein; NON_TER
NON_TER
SEQUENCE 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     T2B_PARTE
Q27174;
                                                                                                                                  modified and this statement is not removed. Usage by and for entities requires a license agreement (See http://www.isb-sib.or send an email to license@isb-sib.ch).
                                                                                                                                                                                                          This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way
                                                                                                                                                                                                                                                                                                                                                                                                                      Biochimie 76:329-335(1994).
-!- FUNCTION: STRUCTURAL PROTEIN THAT CRYSTALLIZE INSIDE TRICHOCYST MATRIX.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Madaddu L., Gautier M.-C., Vayssie L., Houar
"A large multigene family codes for the poly
crystalline trichocyst matrix in Paramecium.
Mol. Biol. Cell 6:649-659(1995).
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                                                                                                                                                                                                                                                                                                                           -!- SUBCELLULAR LOCATION: TRICHOCYST. THESE ARE ARCHITECTURALLY COMPLEX SECRETORY STORAGE GRANULES-DOCKED AT THE PLASMA MEMICES TO RAPLELY RESPOND TO AN EXOCYTOTIC STIMULUS.
-!- SIMILARITY: BELONGS TO THE TMP FAMILY.
                                                                                             EMBL; U27510;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRAIN-D4-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Paramecium
Eukaryota;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE=95119139; PubMed=7819344;
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7; Conserv
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                                                                                             AAA92610.1;
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38, Last sequence update)
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PROTEIN T2-B (SECRETORY GRANULE
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P35482;
01-JUN-1994
01-JUN-1994
15-JUL-1999
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P80342;
01-OCT-1994
                                                                                                                                                                                                                                                                                                                                                          NON_TER
          MEDLINE-93202452; PubMed-8454193;
Tan A.S.P., Worobec E.A.;
"Isolation and characterization of two immunochemically alkaline phosphatases from Pseudomonas aeruginosa.";
FEMS Microbiol. Lett. 106:281-286(1993).
                                                                                                                          01-JUN-1994 (Rel. 29, Created)
01-JUN-1994 (Rel. 29, Last sequence up
15-JUL-1999 (Rel. 38, Last annotation
ALKALINE PHOSPHATASE L (EC 3.1.3.1) (1)
Pseudomonas aeruginosa.
                                                                                                                                                                                                         PSEAE
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01-OCT-1994 (Rel. 30, Last sequence update)
01-OCT-1995 (Rel. 32, Last annotation update)
01-NOV-1995 (Rel. 32, Last annotation update)
CATHEPSIN L2 (EC 3.4.22.15) (FRAGMENT).
Fasciola hepatica (Liver fluke).
Eukaryota, Metazoa: Platyhelminthes; Neodermata; Trematoda; Digenea;
Echinostomida; Echinostomata; Fascioloidea; Fasciolidae; Fasciola.
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                                                                                                               Pseudomonas aeruginosa.
Bacteria; Proteobacteria;
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PROSITE; PS00139; THIOL_PROTEASE_HIS;
PROSITE; PS00639; THIOL_PROTEASE_ASN;
PROSITE; PS00640; THIOL_PROTEASE_ASN;
                                                                                  SEQUENCE.
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                                                                     STRAIN-H103;
                                                                                                        Pseudomonas
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  FUNCTION: HAS
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  PHOSPHOMONOESTERASE
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Pred. No. 1.4e
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Q56715;
15-DEC-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN-ATCC 15338;
MEDLINE-97149305; PubMed-8996113;
Setterquist R.A., Smith G.K., Oakley T.H., Lee Y.H., Fox G.E.;
"Sequence, overproduction and purification of Vibrio proteolyticus ribosomal protein L18 for in vitro and in vivo studies.";
Gene 183:337-242(1996).
                                                                                                                                                                                                                        EMBL; U38943; AAB41328.1; -.
INTERPRO; IPR002358; -.
PROSITE; PS00525; RIBOSOMAL_L6_1;
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Hydrolase; Zinc; Magnesium;
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SIMILARITY: BELONGS TO THE L6P FAMILY OF RIBOSOMAL PROT
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DEVELOPMENTAL STAGE:
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SUBCELLULAR LOCATION:
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CATALTIC ACTIVITY: AN ORTHOPHOSPHORIC MONOESTER + H(2)0 = AN ALCOHOL + ORTHOPHOSPHATE (AT A HIGH PH OPTIMUM).

COFACTOR: METALLOENZYME CONTAINING TWO ZINC ATOMS AND A MAGNESIUM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PHOSPHATE POOR MEDIA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           proteolyticus (Aeromonas
ia; Proteobacteria; gamma
                                           6; Conserv
                                                                                                                                                                                                   protein;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (Rel. 37, Created)
(Rel. 37, Last sequence up)
(Rel. 37, Last annotation)
AL PROTEIN L6 (FRAGMENT).
                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
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Magnesium; Periplasmic.
  20
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                                                                                                                                                                                                     rRNA-binding
                                                                  23.5%;
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                                                                  Score 23;
Pred. No.
                                                                                                                                                            ABC19078DF581B6C
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           proteolytica)
subdivision;
                                                Mismatches
                                                                                                                                                                                                                          PARTIAL
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9.9e+02;
                                                                                       В
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                                                                     1e+03
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RESULT 11
UKAL_HUMAN
ID UKAL_HUMAN
AC P31940;
AC P31940;
DT 01-JUL-1993
DT 01-JUL
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Best Local S
Matches 3
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01-OCT-1994
01-OCT-1994
15-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ONCMY
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01-JUL-1993 (Rel. 26, Last sequence update)
01-JUL-1993 (Rel. 26, Last annotation update)
UNKNOWN PROTEIN FROM 2D-PAGE OF EPIDERMAL KERATINOCYTES
                                                                          "Identification of tissue-specific isoforms for subunits Vb and VI:
of cytochrome c oxidase isolated from rainbow trout.";
Eur. J. Blochem. 221:111-1116(1994).
-I- FUNCTION: THIS PROTEIN IS ONE OF THE NUCLEAR-CODED POLYPEPTIDE CHAINS OF CYTOCHROME C OXIDASE, THE TERMINAL OXIDASE IN MITOCHONDRIAL ELECTRON TRANSPORT.
-I- CATALYTIC ACTIVITY: 4 FERROCYTOCHROME C + O(2) = 2 H(2)0 +
                                                                                                                                                                                                                                                                                                                                                                             Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri).
Eukaryota; Mettazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Nepopterygii; Teleostei; Euteleostei;
Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-OCT-1994 (Rel. 30, Created)
01-OCT-1994 (Rel. 30, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
CYTOCHROME C OXIDASE POLYPEPTIDE YB-HEART (EC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Microsequences of 145 proteins recorded in the two-dimensi protein database of normal human epidermal keratinocytes."; Electrophoresis 13:960-969(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (Human).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                        MEDLINE=94237150; PubMed=8181469; Freund R., Kadenbach B.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -!- MISCELLANEOUS: ON THE 2D-GEL THE DETERMINED PI OF THIS UNKNOWN PROTEIN IS: 7.24, ITS MW IS: 23.5 KDA.
AARHUS/GHENT-2DPAGE; 1118; IEF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE.
TISSUE-KERATINOCYTES;
                                                                                                                                                                                                                                                                                                             TISSUE-HEART;
                                                                                                                                                                                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COXF_ONCMY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rasmussen H.H., van Damme J., Vandekerckhove J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE-93162043; PubMed-1286667;
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                             SUBCELLULAR
                                                       4 FERRICYTOCHROME C.
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  BELONGS TO THE CYTOCHROME
                       LOCATION: MITOCHONDRIAL INNER MEMBRANE
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1.3e+03;
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  OXIDASE VB
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PA22_BOTSC
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Best Local
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PFAM; PF00068; phoslip; 1.

PROSITE; PS00118; PA2_HIS; P.

PROSITE; PS00119; PA2_ASP; P.

TOXID; Venom; Multigene fami
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01-NOV-1997
01-NOV-1997
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15-JUI-1998 (Rel. 36, Last annotation update)
PHOSPHOLIPASE A2 HOMOLOG, MYOTOXIN II (FRAGMENT).
Bothriechis schlegelii (Eyelash viper).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Lepidosauria; Squamata; Sceleroglosa; Serpentes; Col
Viperidae; Crotalinae; Bothriechis.
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INTERPRO; IPR002124; -.
PROSITE; PS00848; COX5B;
                                     Theromyzon tessulatum (Leech).
Eukaryota; Metazoa; Annelida;
Rhynchobdellida; Glossiphoniid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Arch. Blochem. Blophys. 339:260-266(1997).
-!- FUNCTION: THIS MYCTOXIC PROTEIN LACKS ENZYMATIC ACTIVITY.
-!- SIMILARITY: BELONGS TO THE PHOSPHOLIPASE A2 FAMILY.
HSSP, P24605; lclp.
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SEQUENCE
                                                                                                       CYTIN B CHAIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
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4 KGIPTDEEQ
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5 AA;
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Chopin V., Bilfinger T.V., Stefano G.B., Hatiar I., Salzet Chopin V., Bilfinger T.V., Stefano G.B., Hatiar I., Salzet "Amino-acid-sequence determination and biological activity a naturally occurring specific chymotrypsin inhibitor from Theromyzon tessulatum.";
Eur. J. Biochem. 249:733-738(1997).
-i- FUNCTION: INHIBITOR OF CHYMOTRYPSIN.
-i- SUBUNIT: HETERODIMER OF AN A CHAIN AND A B CHAIN, LINKE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Litoria caerula.";

J. Chem. Res. 138:910-936(1993).

-i- FUNCTION: ANTIBACTERIAL PEPTIDE, THAT ADOPTS AN ALPHA HELICAL CONFORMATION WHICH CAN DISRUPT BACTERIAL MEMBRANES. EACH CAERIN DISPLAYS A DIFFERENT ANTIMICROBIAL SPECIFICITY.

-i- TISSUE SPECIFICITY: SECRETED BY THE SKIN PAROTOID AND/OR ROSTRAL
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requires a license agreement (See http://www.isb-sib.ch/announce/an email to license@1sb-sib.ch).

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P96154;
15-JUL-1998 (Rel. 3
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15-JUL-1998 (Rel. 3
                                                                                                                                                                                                                Carroll P.A., Zhao G., Boyko S.A., Winkler M.E., Calderwood "Identification, sequencing, and enzymatic activity of the erythrose-4-phosphate dehydrogenase gene of Vibrio cholerae. J. Bacteriol. 179:293-296(1997).

-I- CATALYTIC ACTIVITY: ATP + 3-PHOSPHO-D-GLYCERATE = ADP + 3-PHOSPHO-D-GLYCEROYL PHOSPHOTE.
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SEQUENCE
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial
                                                                                                                               -1- PATHMAY: SECOND STEP IN THE SECOND PHASE OF GLYCOLYSIS.
-1- SUBUNIT: MONOMER (BY SIMILARITY).
-1- SUBCELLULAR LOCATION: CYTOPLASMIC.
-1- SIMILARITY: BELONGS TO THE PHOSPHOGLYCERATE KINASE FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Purification and characterization of uridine and thymidine phosphorylase from Lactobacillus casel.";
Biochim. Blophys. Acta 1040:287-293(1990).
-i- FUNCTION: THE ENZYMES WHICH CATALYZE THE REVERSIBLE PHOSPHORYLOSIS OF PYRIMIDINE NUCLEOSIDES ARE INVOLVED IN THE DEGRADATION OF THESE COMPOUNDS AND IN THEIR UTILIZATION AS CARBON AND ENERGY SOURCES, OR IN THE RESCUE OF PYRIMIDINE BASES FOR NUCLEOTIDE SYNTHESIS.
-i- CATALYTIC ACTIVITY: URIDINE + PHOSPHATE - URACIL + ALPHA-D-RIBOSE
                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A. STRAIN-OGAWA 395;
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-!- SUBUNIT: HOMOTETRAMER.
-!- SIMILARITY: BELONGS TO T
PIR; S11383; S11383.
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01-JUL-1993 (Rel. 2
30-MAX-2000 (Rel. 3
ELONGATION FACTOR G
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INTERPRO; IPRO01576; -.
PROSITE; PS00111; PGLYCERATE_KINASE;
                                                                                                                                                                                                         Elongation factor; Protein
NON_TER 1 1
SEQUENCE 17 AA; 2094 MW;
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INTERPO, IPRO00795; ...
PROSITE; PS00301; EFACTOR_GTP; PARTIAL.
PROSITE; PS00301; Protein biosynthesis;
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PIR; S29294; S29294.
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FUNCTION: THIS PROTEIN
OF THE NASCENT PROTEIN
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5; Conserv
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THIS PROTEIN PROMOTES THE GTP-DEPENDENT TRANSLOCATION
SCENT PROTEIN CHAIN FROM THE A-SITE TO THE P-SITE OF T
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G (EF-G) (FRAGMENT).
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C P21597;

T 01-MAY-1991 (Rel. 18, Created)

T 01-MAY-1991 (Rel. 18, Last sequence update)

DT 01-MAY-1991 (Rel. 18, Last annotation update)

MAJOR PROHEAD SCAFFOLDING CORE PROTEIN GP22 (CO)

POUTLE VII] (FRAGMENT).
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Electron transport;
NON_TER 18
SEQUENCE 18 AA; 7
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Bacteria; Proteobacteria; alpha subdivision; Rhizobiaceae group;
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Viruses; dsDNA viruses,
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-!- SUBUNIT: FIXA AND FIXB FORM A HETERODIMER (PROBABLE).
-!- SIMILARITY: BELONGS TO THE ETF BETA-SUBUNIT / FIXA FAMILY.
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Hontelez J.G.J., Lankhorst R.K.,
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(Rel. 13, Last sequence up)
(Rel. 31, Last annotation)
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Pred. No.
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Best Local :
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P37356;
P37356;
O1-CCT-1994 (Rel. 30, Created)
O1-CCT-1994 (Rel. 30, Last sequence update)
O1-CCT-1994 (Rel. 30, Last annotation update)
30-MAY-2000 (Rel. 39, Last annotation update)
N-ACYL-L-AMINO ACID AMIDOHYDROLASE (EC 3.5.1.14) (L-AMINOACYLASE)
                                                                                                                                                                                                                                                                      LT 22
_AGABI
_RL41_AGABI
_P78569;
01-NOV-1997
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01-NOV-1997
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Agric. Biol. Chem. 51:2793-8800(1987).
-!- CATALTIC ACTIVITY: A N-ACYL-L-AMINO ACID + H(2)O - A FATTY ACID
ANION + A L-AMINO ACID.
-!- COFACTOR: ACTIVATED BY COBALT (BY SIMILARITY).
-!- SUBJUNIT: HOMOTETRAMER.
-!- SUBJUNIT: HOMOTETRAMER.
-!- SIMILARITY: BELONGS TO PEPTIDASE FAMILY M40, ALSO KNOWN AS THE
AMA/HIPO/HYUC FAMILY OF HYDROLASES.
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Cho H.-Y., Tanizawa K., Tanaka
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bacillus thermoglucosidasius.
Bacteria; Firmicutes; Bacillus/Clostridium group;
  assignment
                   MEDLINE-97111990; PubMed-8953726;
Sonnenberg A.S.M., de Groot P.W.J., Schaap P.J., I
Visser J., van Griensven L.J.L.D.;
"Isolation of expressed sequence tags of Agaricus
                                                                                                           STRAIN-HORST U1;
                                                                                                                                                                                           Agaricus bisporus
Eukaryota; Fungi;
                                                                                                                                                                                                                                                       S09
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                                                                                                                            SEQUENCE FROM N.A.
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Pred. No. 3.3e
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RESULT 23
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PROSITE; P
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Krishna R.G., Chin C.C.O., Wold F.;
"N-terminal sequence analysis of N alpha-acetylated proteins afte
unblocking with N-acylaminoacyl-peptide hydrolase.";
anal. Biochem. 199:45-50(1991).

-!- FUNCTION: THIS ENZYME CATALYZES THE HYDROLYSIS OF THE AMINO-
TERMINAL PEPTIDE BOND OF AN N-ACETYLATED PEPTIDE TO GENERATE
AN N-ACETYLATED AA AND A PEPTIDE WITH A FREE AMINO-TERMINUS.
IT PREFERENTIALLY CLEAVES OFF AC-ALA, AC-MET AND AC-SER.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-MAY-1992 (Rel. 22, Created)
01-MAY-1992 (Rel. 22, Last sequence update)
01-OCT-1996 (Rel. 34, Last annotation update)
ACYLAMINO-ACID-RELEASING ENZYME (EC 3.4.19.1)
(APH) (ACYLAMINOACYL-PEPTIDASE) (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Oryctolagus cuniculus (Rabbit).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eu
Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -!- SUBUNIT: HOMOTETRAMER.
-!- SIMILARITY: BELONGS TO PEPTIDASE PROLYL OLIGOPEPTIDASE FAMILY.
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                                                                                                                                                                                                                                                                                               Hydrolase;
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MERQVL 6
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: Pred. No. 3.4e
3; Mismatches
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Pred. No. 8.9e+04;
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RESULT 24
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P34938;
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MEDITINE=92011547; PubMed=1655739;

de Crecy-Lagard V., Bouvet O.M., Lejeune P., Danchin A.;

"Fructose catabolism in Xanthomonas campestris pv. campestris.

Sequence of the PTS operon, characterization of the fructose-specific
                                                                                                                                       Electrophoresis 14:1060-1066(1993).
--- TISSUE SPECIFICITY: STARCHY ENDOSPERM.
--- DEVELOPMENTAL STAGE: GERMINATION.
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SEQUENCE 15 AA; 1735 MW; 2669969DDEAFE
                                                                                                                                                                                                                                                                                                                                                              SEQUENCE.
STRAIN-CV. H354-295-2-5; TISSUE-STARCHY ENDOSPERM;
MEDLINE-94170739; PubMed-8125056;
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01-OCT-1993 (Rel. 27, Last sequence update)
01-OCT-1993 (Rel. 27, Last annotation update)
HYPOTHETICAL PROTEIN IN FRUK S'REGION (ORF1) (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          YMTP_XANCP
Q03397;
                                                                                                                                                                                                                                                                                    "Separation of acidic barley endosperm electrophoresis.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-FEB-1994 (Rel. 28, Created)
01-FEB-1994 (Rel. 28, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
15-JUL-1999 (Rel. 38, Last annotation update)
UNKNOWN ENDOSPERM PROTEIN E-15/E-16/E-17 (FRAGMENT).
HOrdeum vulgare (Barley).
Eukaryota; Viridiplantae; Embryophyta; Tracheophyta;
Eukaryota; Viridiplantae; Deales; Poaceae; Hordeum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hypothetical protein.
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J. Biol. Chem. 266:18154-18161(1991).
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Bacteria; Proteobacteria; gamma subdivision; Xanthomonas group;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Xanthomonas.
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0; Mismatches
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Qy 7 PSDLER 12
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Db 8 PYDLNR 13
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Search completed: February 5, 2001, 11:34:15 Job time: 357 sec

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Post-processing: Minimum Match
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c;Species: Drosophila pseudoobscura
c;Species: Drosophila pseudoobscura
c;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change c;Date: 50-7645
C;Accession: $07645
R;Garbe, J.C.; Bendena, W.G.; Pardue, M.L.
genetics 122, 403-415, 1989
A;Title: Sequence evolution of the Drosophila heat shock locus h, Reference number: $07645; MUID:89357452
A;Accession: $07645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    hemocyanin chain 3C - Sahara scorpion (fragment)
C;Species: Androctonus australis (Sahara scorpion)
C;Date: 17-U1-1994 #sequence_revision 17-U1-1994 #text_change 07-May-1999
C;Accession: G61308
R;Jolles, J; Jolles, P.; Lamy, J.; Lamy, J.
EEBS Lett. 106, 289-291, 1979
                                                                                                                                                                                                                                                                                                                                                                                                         A;Title: Structural characterization of seven
A;Reference number: A61308; MUID:80047238
A;Accession: G61308
A;Status: preliminary
A;Molecule type: protein
A;Residues: 1-14 <JOL>
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G61308
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                                                                                             A;Gene: FlyBase:Hsr93D
A;Cross-references: FlyBase:FBgn0001234
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A;Molecule type: DNA
A;Residues: 1-24 <GAR>
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GenCore version Copyright (c) 1993 - 2000

Compugen Ltd

Scoring table:

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R:Yao, R.; Burr, D.H.; Doig, P.; Trust, T.J.; Niu, Mol. Microbiol. 14, 883-893, 1994
A;Title: Isolation of motile and non-motile insert; A;Reference number: I40776; MUID:95231295
A;Accession: S61451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31K protein 3208 - rice (strain Nihonbare) (fragment)
;Species: oryza sativa (rice)
C;Date: 03:Peb-1994 #sequence_revision 03-Feb-1994 #text_change 11-Apr-1995
C;Accession: PS0257
R;Tsugita, A; Kamo, M.
submitted to JIPID, April 1993
A;Reference number: PS0209
A;Accession: PS0257
                                                                                                                                                                                                          hypothetical protein 2 - Campylobacter jejuni (fragment)
C;Species: Campylobacter jejuni
C;Date: 05-Dec-1998 #sequence_revision 05-Dec-1998 #text_change 04-Mar-2000
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S61451
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Proc. Natl. Acad. Sci. U.S.A. 88, 10711-10715, 1991
A;Title: Detection of homeobox genes in development and evolution.
A;Reference number: A41606; MUID:92073357
A;Accession: H41606
                      A; Molecule type: DNA
A; Residues: 1-17 <YAO>
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A;Cross-references: GB:U09019; NID:g1177809; PIDN:AAA86823.1; PID:g1177811
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C;Date: 30-Jun-1992 #sequence_revision 30-Jun-1992 #text_change 24-Sep-1999 C;Date: 30-Jun-1992 #text_change 24-Sep-1999 C;Accession: H41606
R;Murtha, M.T.; Leckman, J.F.; Ruddle, F.H.
R;Murtha, M.T.; Leckman, J.F.; Ruddle, F.H.
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A; Residues: 1-25 <MUR>
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83.3%;
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77.8%;
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Pred. No. 4.9e+02;
0; Mismatches 1
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                                                            conceptual
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uvsX protein - phage T6 (fragment)
c;Speciles: phage T6
C;Date: 22-Nov-1993 #sequence_revision
c;Accession: S35627
R;Winkler, M.; Rueger, W.
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"hes 8; Conserva
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Title: Purification and characterization of the urease enzymes of Helicobacter A;Reference number: A49215; MUID:93084378
A;Accession: H49215
                                                                                                                                                                                                                                                                                                                             A; Pathway: oxidative phosphorylation; respiratory chain C; Keywords: electron transfer; membrane-associated comp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C;Accession: $77983
R;Arnold, S.; Lee, J.; Kim, M.; Sc submitted to the Protein Sequence A;Reference number: $77980
A;Accession: $77983
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                                                                                                                                                                                                                                                                                                                                                                                                                   A; Experimental source: heart; liver
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C;Species: Thunnus obesus (bigeye tuna)
C;Date: 17-Sep-1997 #sequence_revision 17-Sep-1997 #text_change 30-
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4; Conservative
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6; Conserv
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5259-5266, 1992
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Pred. No. 9.1e+02
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Pred. No. 9.1e+02;
Pred. No. 9.1e+02;
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Pred. No. 7.7e+02;
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tyrocidine synthase I - Bacillus brevis (fragments)
(;Species: Bacillus brevis
(;Date: 01-Dec-1995 #sequence_revision 01-Dec-1995 #text_change 17-Mar-1999
(;Accession: A53794
R;Pavela-Vrancic, M.; Pfeifer, E.; Schroeder, W.; von Doehren, H.; Kleinkauf
J. Biol. Chem. 269, 14962-14966, 1994
A;Title: Identification of the ATP binding site in tyrocidine synthetase 1 k
A;Reference number: A53794; MUID:94253050
A;Recession: A53794
A;Status: preliminary
A;Molecule type: protein
A;Residues: 1-22 <PAV>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Riwinkler, M.; Rueger, W.
Nucleic Acids Res. 21, 1500, 1993
A;Title: Cloning and sequencing of the genes
A;Reference number: S35622; MUID:93219141
A;Accession: S35624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Status: preliminary; nucleic acid sequence not shown; translation not shown A;Molecule type: DNA A;Molecule type: DNA A;Residues: 1-22 <MIN> A;Cross-references: EMBL:X68724; NID:g296435; PIDN:CAA48665.1; PID:g296438 A;Note: the nucleotide sequence was submitted to the EMBL Data Library, Octob
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nucleic Acids Res. 21, 1500, 1993
A;Title: Cloning and sequencing of the genes of beta-glucosyl-HMC-alpha-glucosyl-transfe A;Reference number: S35622; MUID:93219141
A;Accession: S35627
A;Status: preliminary; nucleic acid sequence not shown; translation not shown
A;Molecule type: DNA
A;Residues: 1-16 <WIN>
A;Residues: 1-16 <WIN>
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C; Accession: S35624
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Pred. No. 1.4e+03;
2; Mismatches
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Library, October 1992
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Library, October
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threonine dehydratase (EC 4.2.1.16) - Salmonella ty
C:Species: Salmonella typhimurium
C:Date: 05-Jun-1987 #sequence_revision 05-Jun-1987
C:Accession: B22317
R:Kim, S::: Datta, P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C;Species: Sambucus ebulus
C;Species: Sambucus ebulus
C;Date: 16-Feb-1994 *sequence_revision 25-Apr-1997 *text_change 23-May-1997
C;Accession: B47424
R;Girbes, T; Citores, L; Iglesias, R.; Ferreras, J.M.; Munoz, R.; Rojo, M.A.; Arias J. Biol. Chem. 268, 18195-18199, 1993
A;Title: Ebulin 1, a nontoxic novel type 2 ribosome-inactivating protein from Sambucu A;Reference number: A47424; MUID:93352642
A;Contents: leaves
A;Accession: B47424
                                                                                               A;Cross-references:
C;Genetics:
A;Genome: plasmid
                                                                                                                                                                                             R:Dorrington, R.A.; Bardien, S.; Rawlings, D.E. Gene 108, 7-14, 1991
A;Title: The broad-host-range plasmid pTF-FC2 r
A;Reference number: JS0637; MUID:92104508
A;Accession: PS0273
                                                                                                                                                                                                                                                                                         hypothetical protein 3 (repB 3' region) - Thiobacillus ferrooxidans plasmid C;Species: Thiobacillus ferrooxidans C;Date: 30-Jun-1992 #sequence_revision 30-Jun-1992 #text_change 18-Jun-1993 C;Accession: PS0773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Molecule type: protein
A; Residues: 1-25 <GIR>
A; Note: sequence extracted from NCBI backbone (NCBIP:136443)
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A;Accession: B22317
A;Accession: B22317
A;Residues: 1-24 <KIM>
C;Superfamily: threonine dehydratase
C;Keywords: carbon-oxygen lyase; hydro-lyase; threonine catabolism
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Biochim. Blophys. Acta 706, 27-35, 1982
A;Title: Chemical characterization of biodegradative threonine dehydratases
A;Reference number: A90645; MUID:83023208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            nontoxic type 2 ribosome-inactivating protein ebulin 1 B chain -
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A; Residues: 1-23 < DOR>
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Best Local Similarity 50.0
Matches 5; Conservative
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; Pred. No. 1.8e
4; Mismatches
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hemocyanin chain Ia - Japanese spiny lobster (fragment)
C;Species: Panulirus Japonicus (Japanese spiny lobster)
C;Date: 31-Dec-1988 #sequence_revision 31-Dec-1988 #text_change 01-Aug-1997
C;Accession: S00492
R;Makino, N.; Kimura, S.
Bur. J. Biochem. 173, 423-430, 1988
Eur. J. Biochem. 173, 423-430, 1988
A;Title: Subunits of Panulirus Japonicus hemocyanin. 1. Isolation and proper A;Reference number: S00492; MUID:88196131
A;Accession: S00492
A; Molecule type: protein A; Residues: 1-20 < MAK> C; Superfamily: hemocyanir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Molecule type: DNA
A; Residues: 1-18 < YAM>
A; Experimental source: B lymphocyte
A; Experimental source: B lymphocyte
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A;Title: Preferential utilization of specific immunoglobulin heavy chain diverseration number: PT0222; MUID:91108337
A;Accession: PT0239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             aldehyde dehydrogenase (EC 1.-.-.) - rat (fragment)
C;Speckes: Rattus norvegicus (Norway rat)
C;Date: 02-Aug-1996 #sequence_revision 02-Aug-1996 #text_change 05-Nov-1999
C;Accession: I52226
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(;Species: Homo sapiens (man)
(;Decies: Homo sapiens (man)
(;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 16-Aug-1996
(;Accession: PT0239
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C;Keywords: oxidoreductase
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A;Molecule type: mRNA
A;Residues: 1-16 <RES>
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A;Tittle: Characterization of a functional recombinant rat liver aldehyde dehydrogenase:
A;Reference number: I52226; MUID:88209084
A;Accession: I52226
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Pred. No. 1.5e+03;
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caldesmon - turkey (fragment)
C;Species: Meleagris gallopavo (common turkey)
C;Date: 21-Sep-1990 #sequence_revision 21-Sep-1990 #text_change 24-Jun-1993
C;Accession: A35552
R;Velaz, L.; Ingraham, R.H.; Chalovich, J.M.
J. Biol. Chem. 265, 2929-2934, 1990
A;Title: Dissociation of the effect of caldesmon on the ATPase activity and A;Accession: A35552
A;Status: preliminary
A;Molecule type: protein
A;Residues: 1-16 <VEL>
T cell receptor alpha chain V region (clone 2PBL V alpha 24-6) - human (fragment) C; Species: Homo sapiens (man) C; Species: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 16-Jul-1999 C; Accession: PHI790 C; Accession: PHI790 R; Porcelli, S.; Yockey, C.E.; Brenner, M.B.; Balk, S.P. J. Exp. Med. 178, 1-16, 1993 A; Title: Analysis of T cell antigen receptor (TCR) expression by human peripheral
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C;Accession: S45655
R;Dowd, A.J.; Smith, A.M.; McGonigle, S.; Dalton, J.P.
Eur. J. Biochem. 223, 91-98, 1994
A;Title: Purification and characterisation of a second cathepsin L
A;Reference number: S45655; MUID:94307282
A;Accession: S45655
A;Residues: 1-14 <DOW>
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$43655
cathepsin L (EC 3.4.22.15) 2 - liver fluke (fragment)
N;Alternate names: cysteine proteinase
C;Species: Fasciola hepatica (liver fluke)
C;Date: 10-Dec-1994 #sequence_revision 26-Jul-1996 #text_change 26-Jul-1996
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Best Local Similarity 37.1
Matches 3; Conservative
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A; Reference number: PH1
A; Accession: PH1790
A; Status: prelliminary
A; Molecule type: mRNA
A; Residues: 1-16 < POR>
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C;Species: Bos primigenius taurus (cattle)
C;Date: 30-Apr-1993 #sequence_revision 18-Nov-1994 #text_change 23-Mar-1995
C;Accession: E45066
R;Kojima, K.; Ogawa, H.K.; Seno, N.; Yamamoto, K.; Irimura, T.; Osawa, T.; Matsumoto, I.
J. Biol. Chem. 267, 20536-20539, 1992
A;Title: Carbohydrate-binding proteins in bovine kidney have consensus amino acid sequen A;Reference number: A45066; MUID:93015942
A;Accession: E45066
A;Accession: E45066
A;Molecule type: protein
A;Residues: 1-16 <KOJ>
A;Experimental source: kidney
A;Note: sequence extracted from NCBI backbone (NCBIP:116212)
                                                                                                                                                                                                                                                                                                                       R:Yaguchi, M.; Visentin, L.P.; Zuker, M.; Matheson, A.T.; Roy, C.; Strom, A.R. Zbl. Bakt. Hyg. I. Abt. Orig. C 3, 200-208, 1982
A;Title: Amino-terminal sequences of ribosomal proteins from the 30S subunit of A;Reference number: S11609
A;Accession: S11611
                                                                                                                                                                                                                                                                                                                                                                                                           ribosomal protein S2 [validated] - Halobacterium salinarum (fragment)
N;Alternate names: ribosomal protein HSSA
C;Species: Halobacterium salinarum
C;Species: Halobacterium salinarum
C;Date: 31-Dec-1990 #sequence_revision 31-Dec-1990 #text_change 21-Jul-2000
C;Accession: S11611
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cytochrome-c oxidase
C; Species: Salmo sp.
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A;Residues: 1-19 <YAG>
A;Rosidues: 1-19 <YAG>
A;Note: the protein is designated as ribosomal protein HS5A
C;Keywords: protein biosynthesis; ribosome
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cytochrome-c oxidase (EC 1.9.3.1) chain IV, cardiac - rat (fragment) c;Species: Rattus norvegicus (Norway rat) c;Date: 12-Feb-1998 #sequence_revision 20-Feb-1998 #text_change 16-Jul-1999 c;Accession: S65374 R;Schaegger, H.; Noack, H.; Halangk, W.; Brandt, U.; von Jagow, G. Eur. J. Biochem. 230, 235-241, 1995 Lar. J. Biochem. 230, 235-241, 1995 R;Title: Cytochrome-c_oxidase in developing rat heart. Enzymic properties at A;Title: Cytochrome-c_oxidase in developing rat heart.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C;Accession: $48746

C;Accession: $48746

V; le Caer, J.P.; Prome, J.C.; Rossier, J.

FEBS Lett. 353, 89-94, 1994

A;Title: Class I and IVa beta-tubulin isotypes expressed in adult mouse brain are A;Reference number: $48741; MUID:95010772

A;Accession: $48746

A;Status: preliminary

A;Molecule type: protein

A;Residues: 1-20 <MAR>
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A; Molecule type: protein
A; Residues: 1-20 <FRE>
C; Keywords: electron trai
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gur. J. Biochem. 221, 1111-1116, 1994
A;Title: Identification of tissue-specific isoforms
A;Reference number: $43624; MUID:94237150
A;Accession: $43627
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A;Accession: S65374
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C;Species: Mus musculus (house mouse)
C;Date: 07-May-1995 #sequence_revision 21-Jul-1995 #text_change 17-Mar-1999
C;Accession: $48746
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C;Accession: S43627
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A; Residues: 1-23 <SCH>
C; Superfamily: cytochrome-c
C; Keywords: cardiac muscle;
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